

Plant breeding abstracts



AUTHOR INDEX

FILE

to Plant Breeding Abstracts, Volume XXXVII

- AALDERS, L. E., 2090, 3104, 3111, 4979
 Aamissepp, A., 2116
 Aaran, D. S., 6546
 Aaron, E., 5178
 Aastveit, K., 4214, 5447
 Abbondandolo, A., 3567
 Abbott, D. C., 5972
 Abbott, E. V., 2853
 Abdel-Hak, 3883
 Abdel-Hak, T., 304, 6064, 6076-7
 Abdel'hamid, A. M., 2769
 Abdel-Malek, S. H., 455
 Abdel-Nabi, H. A., 1017
 Abdel-Raheem, A., 6583
 Abd-el-Rahim, M. F., 593
 Abdel'-Rêhim, A. M., 1611
 Abdel-Rekhim, *see* Abdel'-Rêhim, 1611
 Abdrahmanov, S. G., 6844
 Abdulaev, B. N., 2786
 Abdul Hameed Khan, 1928-34, 1941-6
 Abdullaev, I. K., 1292, 3066, 6861, 6866
 Abdullov, M. S., 3125
 Abdur-Rahman Bachir Saghir, 1514
 Abe, M., 4115-6, 4198
 Abejón Veloso, J., 924
 Abella, P. A., 1499
 Abelson, J. N., 5393
 Abenov, M. B., 4168
 Abeygunawardena, D. V. W., 1635
 Abid Hussain, 1948
 Abifarín, A. O., 2446
 Abo-Elenein, R. A., 4250
 Abou-Sayed, S. I., 1204, 1308
 Abraham, A., 1852
 Abraham, P., 5914
 Abraham, S., 548, 1804
 Abramov, S. A., 3448
 Abramova, V. R., 4651
 Abrams, R., 7199
 Abuzarli, Z. A., 5904
 Acatrinei, G., 3599
 Accatino, L., P., 944
 Achirei, T., 2365
 Achmet, S., 3129
 Achund-zade, *see* Ahund-zade
 Adair, C. R., 2494
 Adam, I., 3186
 Adams, M. W., 1625-6, 3382
 Adler, T., 458
 Adsuar, J., 2851
 Adya Prasad Mishra, 4824
 Adylhodzaev, I. N., 2789
 Afanasiev, M. M., 3042
 Afendulov, K. P., 3694
 Agadžanjan, *see* Aghajanyan
 Agarwal, R. A., 2852
 Aggarwal, U., 3610
 Aghajanyan, A. Kh., 4945
 Aghajanyan, A. M., 3334
 Agrawal, R. K., 433
 Aguedan, H. B., 4669
 Ahlgren, H. L., 761
 Ahloowalia, B. S., 10, 2574, 3492, 6387
 Ahlrich, V. E., 4521
 Ahmad Khan Almani, 1924
 Ahmad, M., 1707
 Ahmed, I. S., 730
 Ahmed Ismail Kheiralla, 964, 2732
 Ahmed, L., 6750
 Ahmed, Q. A., 1927
 Ahmedova, Z. P., 5515
 Ahn, *see* An
 Ahrens, H., 4159
 Ahuja, M. R., 1135, 2038, 3493, 7106
 Ahund-Zade, A. I., 1685
 Ahund-zade, I. M., 2075, 2079, 3477
 Ahvlediani, K. S., 5624
 Aidoo, A., 2865
 Aigaes, *see* Ejges
 Ajit Singh, 6927
 Airapetjan, V. L., 3318
 Akatrinej, G., 176
 Akatsuka, I.
 Akeley, R. V., 888, 2673-4, 2693
 Akemine, H., 3655, 5452
 Åkerberg, E., 3699, 5590, 6449
 Akers, R. P., 3004
 Akhound-zade, *see* Ahund-zade
 Akhtar Husain, 7213
 Akhtar, S. A., 6607
 Akhtar, S. W., 6607
 Akinbode, B. O., 2304
 Akopjan, *see* Hakobyan
 Akramov, I. K., 5019
 Aksoy, H., 6992
 Alakhnandan Prasad Singh, 799
 Alan, J. J., 1619
 Alban, E. K., 1562
 Albrechtsen, R. S., 245, 2663, 6474
 Alcaraz Mira, E., 6656
 Alcorn, J. L., 5163
 Aldrich, D. T. A., 2565, 6454
 Alekperov, U. K., 1818
 Aleksandrov, A. S., 4004
 Aleksandrov, Ju. A., 5896
 Aleksandrovskij, E. S., 3226
 Alekseev, V. P., 4960
 Alekseeva, O. S., 4047
 Aleksić, D., 6731
 Aleksić, Ž., 6731
 Aleksjejeva, O. S., 6085-6
 Aleščenko, P. I., 6146
 Alešin, E. P., 5860
 Alexander, A. G., 6612
 Alexander, D. E., 470, 4165, 6152, 6160
 Alexander, K. C., 4705
 Alexander, L. J., 1594, 1595, 5230
 Alexander, M. W., 541, 2357, 4158, 4970
 Alexandrescu, V., 575
 Alexei, O., 6925
 Aliasker-Zade, R., 3279
 Aliev, D. S., 5902
 Aliev, M. O., 6860
 Alihanjan, S. I., 128, 3517, 7211
 Alikhanian, *see* Alihanjan
 Alim, A., 1935
 Alimova, G. K., 3961, 4175
 Alipieva, M., 1535, 1538, 5158, 7052
 Ali-zade, M. A., 4661
 Al-Jibouri, H. A., 2261
 Allan, R. E., 441, 1977, 6063
 Allard, R. W., 1632, 1795, 5401
 Allavena, D., 1039
 Allderdice, P. W., 2604-5
 Allen, H. T., 5212
 Alleweldt, G., 5020
 Alley, H. P., 6374
 Allinson, D. W., 833
 Allison, J. C. S., 4130
 Allison, R. M., 3273
 Allo, A. V., 788
 Almeida, C. R. M. de, 5029
 Almeida, F. J. de, 4973
 Almeida, J. L. F. de, 4522, 6923
 Almeida, J. R. M. de, 4456
 Almgård, G., 759
 Alonso, A. E., 5090
 Alpat'ev, A., 5192
 Alpat'ev, N. M., 4677, 5912
 Alpat'eva, L., 1567
 Alpatjew, *see* Alpat'ev
 Alston, F. H., 6775, 6778
 Alvey, D. D., 572
 Alvi, M. A., 1908
 Alvim, P. de T., 4777
 Alvirescu, S., 4136
 Amal Amin Abdel Wahid, 6023
 Amand, H., 6480
 Amano, E., 539
 Amar Giri, 4949
 Amarjit Singh, 2598
 Amati, P., 1784
 Amemiya, A., 4324
 Ames, I. H., 3494
 Aminov, H. L., 6858
 Aminov, J. L., 3065
 Amling, H. J., 4930
 Amma, A. T., 3048
 Amma, S., 4763
 Amor, R. L., 4503
 Ampova, G., 4751
 An, K.-Y., 1467, 3228
 Anand, I. J., 4799, 6747
 Anand, S. C., 2321
 Ananjan, A. A., 7111
 Ananthapadmanabhan, C. D., 2452
 Anasimov, A. M., 5718
 Anciferov, G. I., 3212
 Andelić, M., 5955
 Anderson, C. D., 250
 Anderson, G. D., 4418
 Anderson, I. C., 3505
 Anderson, J. L., 5280
 Anderson, J. O., 4369
 Anderson, L. B., 6381
 Anderson, L. D., 595
 Anderson, M. M., 1335
 Anderson, N., 1036
 Anderson, O., 4091
 Anderson, R. G., 362, 1840, 4032
 Andersson, E., 1404
 Andersson, G., 2915, 6737

Andersson, S., 2293
 Ando, S., 731
 Andrade, A. C., 225
 Andrásfalvy, A., 3266
 Andrásfalvy-Vicenty, M., 1177
 Andreev, K., 1218
 Andreev, L. N., 5901
 Andreev, V. S., 172, 247
 Andreeva, E., 5216
 Andrew, R. H., 566, 599, 601
 Andrews, D. J., 2456
 Andrianova, N. F., 6132
 Andrijušenko, I. A., 4267
 Andrijušina, N., 2667
 Andronicescu, D., 1498, 2908
 Androščuk, O. F., 2409
 Androschchuk, A. F., *see* Androščuk, O. F.
 Angeles, H. H., 3495
 Angell, F. F., 5123
 Angelov, A., 1614
 Angelova-Patarinska, Z., 1735
 Angelus, W., 94, 7045
 Anghel, I., 5170
 Anghelide, N., 4934
 Angulo, M. D., *see* Angulo-Carpio, M. D.
 Angulo-Carpio, M. D., 123, 173, 175, 4820
 Anišin, L. A., 6164
 Anitia, N., 6645
 Ankineedu, G., 4796, 6738
 Annappan, R. S., 2783, 6546
 Anosov, G. G., 5661
 Anpilogov, M. Z., 5636, 5688
 Ansari, M. A. A., 4619
 Anthony, K. R. M., 970, 2741, 2744, 6542
 Antoniani, C., 3896, 3968, 3969
 Antonjuk, N. E., 1303
 Antonova, G. G., 3280
 Antoszewska, Ł., 2425
 Anubhava Narain, 5140
 Anwar Hussain, 1911-4
 Anwar Nasim, 5347
 Anzalone, L., 6613
 Appa Rao, K., 4748
 Appadurai, R., 990
 Appadurai, R. R., 5360
 Appala Naidu, B., 2510
 Appelqvist, L.-Å., 3623, 5463
 Applegate, H. G., 1822, 3346
 Aquino, O., 3967
 Aquino, R. C., 4298
 Aradski, M., 1255
 Araneta, R., 2837
 Araque, R., 6785
 Arawinko, Z. M., 2278
 Arbeláez, T., G., 5273
 Arca, M. N., 6121
 Arceneaux, G., 6604
 Archovskaja, E. V., 5843
 Arenz, B., 4596, 6532
 Arfsten, A., 609
 Arhangel'skaja, Z. M., 5250
 Arhovskaja, E. V., 5620
 Arif, A. M., 3191
 Arinštejn, A. I., 2799
 Arkatova, E. I., 988
 Armas, E. de, 5277
 Armitage, F. B., 3229, 6988
 Armour, R. P., 4777
 Armstrong, G. M., 1525
 Armstrong, J. K., 1525
 Armstrong, J. M., 2625, 4362
 Armstrong, W. D., 3776

Arnason, T. J., 4222
 Arnold, B. L., 803
 Arnold, C.-G., 5405
 Arnold, J. T., 1434
 Arnold, M. H., 971, 2736
 Arnoux, J., 3594
 Arnoux, M., 2800-1
 Arny, D. C., 656
 Arora, N. D., 1645
 Arraudeau, M., 2493
 Arruda, H. V., 5276
 Arsenijević, M., 584, 691
 Art, J., 3257
 Artamonov, V. D., 2210
 Arthey, V. D., 7195
 Artjugina, *see* Artjugina
 Artjugina, Z. D., 5117
 Arunachalam, V., 1846, 6733, 6747
 Arutjunjan, A. S., 6941
 Arutjunova, L. G., 6011
 Asana, R. D., 2246
 Åsander, F., 5590
 Asay, K. H., 4437
 Ascenso, J. C., 1172, 1222, 4774, 6910
 Ascher, P. D., 178, 252
 Asghar, A., 5129-31
 Ashizawa, S., 3307
 Ashley, T. E., 3785
 Ashman, R. B., 6222
 Aspinall, D., 2423, 4255
 Assche, C. Van, 7036
 Assesavesna, S., 2813
 Astadjov, *see* Astadžov
 Astadžov, N., 2340, 4126
 Astahov, V. V., 6920
 Astaurov, B. L., 3512
 Aston, J. L., 6376
 Atai, H., 3873
 Atajanov, *see* Atažanov
 Atal, C. K., 4822
 Atam Singh Kochar, 6626
 Atanasoff, *see* Atanasov
 Atanasov, D., 2109
 Ataullah, M., 6065
 Atažanov, M. A., 2066
 Athwal, D. S., 1836, 6287-90, 6292, 6294, 7197-8
 Atkin, J. D., 5143
 Atkins, J. G., 4335, 6366
 Atkins, R. E., 6066
 Atlas de Gotuzzo, E., 7170
 Atlee, C. B., 2013
 Atraskevič, L. S., 1035
 Attikov, M. A., 6972
 Atwood, K. C., 63
 Auckland, A. K., 1638
 Auerbach, C., 3474, 3531, 3566
 Aufhammer, W., 4203
 Austen, V. C., 3119
 Austin, A., 2231
 Avakjan, *see* Avakyan
 Avakjan, D. O., *see* Avakyan, D. H.
 Avakyan, D. H., 329
 Avakyan, V. A., 6083
 Avanzi, S., 167, 2192, 2217
 Avdhesh Narain, 4070
 Avendano, R. E., 831
 Avendaño T., R., 6440
 Averkov, V. Z., 4755
 Averde, C. W., 1669
 Avetisjan, G. A., 1609
 Avila, A., 2627
 Avila, G. *see* Avila S., G.
 Avila S., G., 6483, 7139
 Avram, M., 5863

Avramčuk, N. G., 640-1
 Avramov, L., 6914
 Axtell, J. D., 3496
 Aycock, R., 5932
 Ayengar, K. K. N. J., 4263
 Ayers, A. D., 2538
 Ayers, J. E., 3329
 Azadyan, R. A., 329
 Azam, F., 2596
 Azatjan, *see* Azadyan
 BABAЕV, F. A., 5696, 5821, 5829
 Babaev, T., 1699
 Babajan, A. A., 5804, 6579
 Babajan, R. S., *see* Babayan, R. M.
 Babajan, V. O., *see* Babayan, V. H.
 Babayan, R. M., 329
 Babayan, V. H., 329
 Babij, M. S., 6840
 Babrikov, D., 3184, 3198
 Babrikow, *see* Babrikov
 Babu, C. N., 2822, 6602, 6614
 Babushkina, *see* Babuškina
 Babuškina, N. I., 2048
 Bacalova, M., 417
 Bacchetti, S., 3444
 Bachitar Singh Ghai, 6749
 Bachmann, L., 1082, 6477
 Bachmann, M. D., 3505
 Baci, E., 4880
 Baclawska, Z., 3976
 Băcvarov, S., 3269
 Badawi, Y., 3624, 5464
 Bădescu, G., 2980
 Badizadegan, M., 6851
 Badoux, S., 868, 6372
 Badran, P. T., 503
 Badruddoza, M., 6704
 Bae, *see* Pai
 Baert, L., 755
 Baetcke, K. P., 3595
 Baëv, C., *see* Baev, H.
 Baev, H., 6870
 Bagchi, S., 4534
 Baggett, J. R., 1631
 Bagireanu, A., 1117, 4000
 Bagirov, M. M., 5696, 5829
 Bahareva, S. N., 5694
 Bahteev, F. H., 3832
 Baia, V., 6041
 Bailey, A. G., 2524
 Bailey, A. V., 1014
 Bailey, C. H., 2973
 Bailey, E. T., 864
 Bailey, R. M., 2972
 Bailod, M., 2981
 Bailov, L., 6657
 Bailova-Yankulova, *see* Bajlova-Jankulova
 Bajbekov, R. A., 451
 Bajkalov, I. L., 3095
 Bajlov, D., 5628, 5899, 6698
 Bajlova-Jankulova, M., 943
 Bajpai, P. N., 3070
 Baker, D. E., 579, 580, 3628, 4105, 6126
 Baker, E. A., 665
 Baker, E. P., 2220, 4015, 4038, 4071-2
 Baker, R. L., 6174, 6176
 Baker, W. K., 1739
 Bakos, Zs., 5505-6
 Bakshi, J. S., 2598
 Bakshi, M. M., 4638
 Bakulin, V. T., 5068
 Bakuras, N., 7154
 Balal, M. S., 3724, 3727

- Balalaev, A. A., 6046
 Balašoiu, A., 2152, 2410
 Balašova, N. N., 5730, 7196
 Balcázar Monzon, G., 233
 Balcázar, M. Z., 4028
 Baldev, K. V., 1646
 Baldi, G., 6330
 Baldini, E., 4935, 6903
 Baldwin, H. I., 5049
 Báldy, B., 5217
 Bálint, A., 2100, 6156, 6199, 3578
 Bálint, I. (Mrs.), 3266
 Bálint, S., 6197
 Baljura, V. I., 4169, 6007
 Balkov, I., 2862
 Ballatore, G. P., 4524
 Baltensperger, H., 6501
 Baluch, M. A. A., 1923-5
 Bamm, R. K., 3264
 Banchetti, P., 3005
 Bandlow, G., 47
 Banerjee, H. T., 6244
 Banerjee, S. K., 352, 5998
 Banga, O., 3260
 Baniță, P., 3193
 Bankovskaja, M. G., 5035
 Bansal, R., 878
 Bansal, R. D., 4536, 6472
 Banthorpe, D. V., 7220
 Banzatto, N. V., 1202
 Barabas, A. G., 6622
 Baranauskajė, A. P., 1613
 Baranovskij, P. M., 2333
 Barbacki, S., 3690
 Barben, H., 1775
 Barber, W. D., 6126
 Barbeta, F., 6678
 Barbieri, R., 1501
 Barcikowska, B., 6466
 Barclay, P. C., 4362
 Bard, A. E. (Jun.), 2325
 Bardenas, E. A., 6356
 Bareš, I., 481
 Barisovskij, I. Ja., 1368
 Barker, A. V., 1597
 Barker, G. L., 4625
 Barkoczi, M., 3444
 Barna, B., 3320
 Barnes, B. V., 1457, 1468, 6967
 Barnes, D. K., 660, 823, 4463, 6421, 6770
 Barnes, E. H., 1359
 Barnes, R. D., 6988
 Barnes, R. F., 6425
 Barnes, W. C., 7090
 Barnett, L., 3559
 Barocka, K.-H., 1114, 4723
 Barr, G. C., 1779
 Barr, G. R., 5095
 Barr, H. J., 628
 Barradas, M. T., 341, 3905
 Barrault, J., 706
 Barreiro, F. D., 4693
 Barrett, H. C., 3148, 6922
 Barrios, A., 5277
 Barrios D., D., 6597
 Barrios G., A., 7150
 Barritt, B. H., 4891
 Barry, J. R., 3769
 Barsegian, S. G., 5804
 Barsukov, V. S., 1725-7
 Barsukova, O. N., 5760
 Barthou, F., 4363
 Bartley, B. G. D., 1172
 Bartoš, A., 5949, 6048
 Bartoš, P., 476, 6073
 Bartoševič, Ju. E., 145
 Bary, A. A. A., 6548
 Baryšman, F. S., 4955
 Basak, S. L., 2804, 4681, 4684-5, 6589
 Basamac, C., 1365
 Basamac, D., 1365
 Bashaw, E. C., 659, 792, 2599, 3760-1
 Basile, R., 297, 306, 4035
 Bassett, I. J., 1224
 Bastelaere, H. Van, 1588
 Bastiani, D. de., 6862
 Bastos Cruz, B. P., 6582, 7121
 Basu, A. K., 2532
 Basu Roy Choudhury, N. C., 2521
 Batcha, M. B. G. R., 2827
 Batchelor, J. M., 2954
 Batchvarov, *see* Bačvarov
 Bates, R. P., 4399
 Bath, D., 2554
 Bathelt, H., 78
 Battaglini, M., 1284
 Batthyány, C., 818
 Batura, A. M., 5947
 Batygina, T. B., 3933, 3961
 Baudet, J., 6154
 Bauer, A., 2949
 Bauer, F., 6108
 Bauer, R., 3658, 4846-7, 5455
 Bauman, L. F., 538, 2344, 4149, 6118
 Baumane, G. K., 4919
 Baur, S., 1313
 Bavappa, K. V. A., 3084
 Bayer, M. H., 4754
 Bazalowa *see* Bacalova
 Bažant, J., 1537
 Baženova, N. M., 3968
 Beachell, H. M., 1848
 Beakbane, A. B., 6773
 Beale, W. L., 2681
 Bean, E. W., 4382
 Beatty, A. V., 3604
 Beatty, D. W., 2319
 Beatty, J. W., 3604
 Bečeresku, D., 5861
 Beck, A. R., 1188
 Beck, B. D. A., 2524, 4307
 Beckett, J. B., 561
 Beckwith, J. R., 3429, 5390
 Beech, D. F., 390
 Beesley, D. W., 4048
 Beger, B., 6056
 Behbudova, S. P., 4140
 Behl, K. L., 6626
 Beil, G. M., 4270
 Bejan, T., 6924
 Bejlin, I. G., 5736
 Bekasova, P. G., 6307
 Bekov, R. H., 5222
 Belderok, B., 3982
 Belea, A., 3929-30
 Beleckij, Ju. D., 164
 Belfield, A. M., 378, 3959
 Belić, B., 3399
 Belik, T. A., 5717
 Belik, V. F., 7067
 Beljakov, I. I., 4247
 Bell, B. M., 2230
 Bell, R. S., 893
 Bellmann, E., 7011
 Bellmann, K., 2638, 4159
 Belorossova, N. V., 1185
 Belous, I. I., 5757
 Belova, Z. F., 4659
 Belova, Z. P., 5236
 Ben', G. G., 3164
 Bénard, G., 1221
 Benc, S., 85, 1083
 Bender, K., 4234
 Benedetti, A., 5587
 Beni, G., 6033
 Benítez, J. M., 2018
 Benken, A. A., 5908
 Benlloch, M., 940
 Bennet, R., 2230
 Bennett, H. W., 1070-1, 3760
 Bennett, J. H., 5400
 Bennett, M., 6793
 Bennett, S. E., 4194, 6125
 Bensman, V. R., 5516
 Benvenuti, A., 4484
 Beraja, A. Ja., 4142
 Berbec, J., 2881, 2888, 6699
 Berbigier, A., 2402
 Berdyšev, A. P., 1688
 Beres, V., 3032-3
 Berezenko, N. P., 1271
 Berežko, S. T., 1084, 4719
 Berežnaja, Z. G., 4533
 Berg, C. C., 630
 Berg, M. A., 2226, 2238, 3990
 Bergamini, A., 4935
 Bergendal, P.-O., 2947, 4859
 Berger, C. A., 1813
 Berger, S., 3637-38, 5200
 Bergh, B. O., 6879, 6881-2, 6886
 Berindei, M., 918
 Bernal, A. A., 4911, 4943
 Bernard, R. L., 1651, 3393, 7164
 Bernardi, J. B., 5263, 7063
 Bernardini, M. B., 1284
 Bernelot Moens, H. L., 4671
 Bernhard, R., 3029
 Berninger, E., 7061
 Bernstein, L., 2847
 Berre, J. R. Le, 6218
 Berson, G., 5175
 Berthaut, J., 4361
 Berthelem, P., 3366
 Bertolini, M., 497
 Besch, H., 403
 Beškurov, V. P., 4180
 Besnier Romero, F., 255
 Bessonova, E., *see* Bessonova, E. I.
 Bessonova, E. I., 3306, 3311
 Beute, M. K., 1691, 5313
 Bevilacqua, B., 5111
 Beyries, A., 1590
 Beznea, D., 5018
 Bezot, P., 707, 2134
 Bhadkamkar, V. B., 2269
 Bhaduri, P. N., 4325
 Bhan, K. C., 3254
 Bhapkar, D. G., 1621, 1843, 7112
 Bhardwaj, B. D., 6435
 Bhardwaj, R. P., 4618, 4640
 Bhargava, B. D., 2925
 Bhargava, P. D., 2485
 Bhaskara Rao, C., 6339
 Bhat, B. K., 1834
 Bhatia, C. R., 1047, 2218, 3497
 Bhatnagar, M. P., 652
 Bhatnagar, P. S., 364
 Bhatt, G. M., 5289
 Bhattacharjee, I.
 Bhattacharjee, T. K., 6744
 Bhattacharyya, D. P., 736
 Bhattacharyya, G. N., 5417
 Bhatti, M. B., 5129-31
 Bhore, D. P., 7112

Biagini, G., 6683
 Bialabok, S., 1458
 Bialobok, *see* Bialabok
 Bianchi, A., 540, 559, 1886, 3691, 4292
 Bibilašvili, P. D., 3156
 Bidault, M., 2579–80, 4434
 Bier, J. E., 1421
 Bieri, W., 4227
 Bieber, K. J., 2174
 Bigornia, A. E., 1324
 Bijšaev, G. Z., 1077
 Bikova, V., 2429
 Bilaus, C., 528
 Binglefords, S., 1694, 2636, 4359
 Bingham, E. T., 4501
 Bingham, J., 399, 5956
 Bingham, R. T., 5103, 6994, 7002
 Birat, R. B. S., 5237
 Birchfield, W., 952, 1006
 Bird, L. S., 6583
 Birie-Habas, J., 705
 Birjuzova, V. I., 1713
 Birnaure, I., 4125
 Bischoff, J., 4893
 Bisessar, S., 2595
 Bishr, M. A., 6548
 Biskup, J., 6650, 6667
 Biskupski, A., 486
 Biswas, G. D., 1700
 Biswas, S., 3900
 Bitters, W. P., 3063
 Bjaanes, M., 6013
 Björkman, E., 1399
 Björling, K., 3656, 5453
 Björn Sigurbjörnsson, 3663, 5460
 Black, W., 935
 Blackhurst, H. T., 3771
 Blackmon, B. G., 6357
 Blagonravov, P. P., 3183
 Blagoveščenskij, A. V., 4455
 Blagoveschensky, *see* Blagoveščenskij
 Blaha, J., 1273
 Blaim, K., 2881
 Blair, I. D., 5284, 6437
 Blaja, D., 3122
 Blake, G. M., 5051
 Blancaver, A. T., 612
 Błaszczak, W., 4603
 Błaszczuk, D., 877
 Bliandur, *see* Bljandur
 Blickenstaff, C. C., 6443
 Blinkova, M., 2368
 Blinov, I. D., 6578
 Bliss, C. I., 7230
 Blixt, S., 1526, 1679–80, 1683, 7178–81, 7185–87
 Bliznec, N. I., 5894
 Bljadovskij, G. S., 6697
 Bljaherova, R., 358
 Bljandur, O. V., 2053
 Block, M., 6178
 Blomquist, A. W., 4580
 Blossfeld, O., 1488
 Blum, A., 2460
 Blumenschein, A., 544
 Bluvštejn, I. N., 4892
 Boardman, E. G., 1306
 Boardman, N. K., 2422
 Bobák, M., 1814, 3609
 Bočeš, I., 6494
 Bobrov, E. G., 5058
 Bočarov, V., 6781
 Bockelée-Morvan, A., 1305
 Bockmann, H., 2258
 Bócsa, É., 320, 3941

Bócsa, I., 5478, 6587
 Bodea, C., 527–28
 Boden, R. W., 1464
 Bodley, J. W., 51
 Bodmer, W. F., 72
 Boeker, P., 3688
 Boerema, E. B., 708
 Boev, V., 414, 427, 2746
 Bogaert, G. van, 3667, 5472
 Bogdan, A. V., 2649
 Bogdan, G. P., 5615
 Bogdanovič, M. V., 4033, 5644, 5680
 Bogle, A. L., 1534
 Bogovik, I. V., 5678, 5713
 Bogyo, T. P., 13
 Bojarczuk, J., 4185
 Bojarczuk, M., 4185
 Bojko, E. I., 7017
 Bojnanský, V., 939
 Bőjtös, Z., 2626
 Bojtovič, R. A., 5742
 Bokák, M., 3608
 Boldea, E., 420, 2255
 Bolelova, Z. A., 2855, 4726
 Bolling, H., 3621
 Bolsunovskaja, O. V., 6021
 Bolte, L. C., 411, 5969
 Bolton, A. T., 1692
 Bonatti, P., 5110
 Bonatti, S., 3454
 Bond, D. A., 3363, 3367, 7132
 Bond, W. T., 7070
 Bondarenko, A. A., 5782–3
 Bondarenko, A. I., 5769, 5781
 Bondarenko, V. I., 4009
 Bong Yul Yoo, 1013
 Bono, M., 2490
 Bontja, V., 5914
 Boom, B. K., 246
 Boos, G., *see* Boos, G. V.
 Boos, G. V., 1496, 3247, 3299
 Borchers, E. A., 3284
 Bordonos, M. G., 4714, 4728
 Borisov, G. N., 4636
 Borisovskij, N. Ja., 6944
 Borissova, L. N., 1704
 Borkowski, J., 1556
 Borlaug, N. E., 334–5, 1414, 5975
 Bormotov, V. E., 6632
 Bornus, L., 251
 Borodina, N. A., 3483, 6787
 Borovskij, M. I., 4147
 Borščeva, T. A., 5684
 Borsdorf, W., 1445
 Borsos, O., 4537
 Börtitz, S., 181
 Borys, M. W., 4588
 Bose, A., 661, 6305
 Bose, M. M., 1045, 4683
 Bose, S., 483, 4680
 Bosemark, N. O., 4718
 Boškovič, M., 295
 Bosova, *see* Bozova
 Bosowa, *see* Bozova
 Botez, M., 6893
 Boubals, D., 3201, 5034, 6921
 Bouldard, L., 7086
 Bouma, W. F., 4572
 Boureau, C., 6926, 6935
 Bowden, H. L., 3134
 Bowden, W. M., 373
 Bowen, H. H., 6907
 Bowers, J. L., 7044
 Bowman, D. H., 3954
 Boyd, M., 2576

Boyd, M. M., 4384
 Boyer, M. G., 1415
 Boyer, P. D., 56–8
 Boynton, J. E., 5205, 5207
 Božinov, M., 6562
 Bozova, L., 2098, 2135, 5603
 Bozzini, A., 2190, 2192, 3648, 3666, 3945, 5443, 5471
 Bracher, E., 4825
 Braconi, L., 1331
 Brad, I., 3975, 6054
 Bradford, R. R., 4105
 Bradley, G. A., 3313, 5256
 Bradley, M. V., 6869
 Bradley, T., 967, 2738
 Bradner, N. R., 4468, 4489
 Bradshaw, A. D., 1751, 2555, 6376
 Bradt, O. A., 4863
 Bragg, L. H., 2560
 Brantley, B. B., 1634
 Brar, H. S., 7197
 Brar, J. S., 7074
 Brasher, E. P., 5166
 Bratosin, S., 116
 Braverman, S. W., 2568
 Brawn, R. I., 2336
 Bray, R. A., 2351
 Breadle, G. W., 3539
 Breaux, R. D., 2818, 4697
 Bredt, H., 6182
 Breese, E. L., 746, 1864, 1874, 4355, 4379
 Bremer, G., 4701
 Brenner, S., 3559, 5379
 Bresler, S. E., 3, 3522
 Bretan, C., 6494
 Bretan, I., 6494, 6530
 Bretschneider-Herrmann, B., 2140
 Brett, C. H., 602, 1530, 1630
 Brett, P. G. C., 2815, 2819
 Brettell, J. H., 6543
 Brewbaker, J. L., 4197, 5435, 6981
 Brezeanu, D., 3351
 Brezhnev, *see* Brežnev
 Brežnev, D. D., 235, 254, 283–4, 5605–6
 Brickbauer, E. A., 3394
 Briggie, L. W., 2252, 2254, 4016
 Briggs, J. B., 6777–8
 Brigham, R. D., 1203
 Brim, C. A., 1648, 1650, 1663
 Bringham, R. S., 1354, 4995, 6902
 Brink, K. M., 7075
 Brink, R. A., 2351–2, 3526–42, 4107
 Brink, V. C., 638
 Brinkerhoff, L. A., 2761
 Brittain, W. H., 1461–2
 Brizicky, G. K., 6575
 Broadhead, D. M., 2824
 Brock, R. D., 861, 1573, 5550–1, 5566, 5591
 Brockwell, J., 2630
 Broeck, H. Van den, 7036
 Broekhuizen, J. T. M., 6970
 Broekhuizen, S., 407, 3864
 Brogdon, J. L., 7115
 Bronckers, F., 6480
 Brookes, R. M., 3032
 Brooks, J. S., 2467, 6320
 Brooks, M. H., 2467, 6320
 Brooks, R. M., 6784
 Brookson, C. W., 1226
 Brossier, J., 1267
 Brouwer, W., 5495
 Browder, L. E., 2266
 Brown, A. G., 4906

- Brown, A. G. P., 969, 2740
 Brown, C. M., 470, 2172
 Brown, D. F., 2316
 Brown, D. M., 1786, 1803
 Brown, G. G., 1256
 Brown, K. J., 968
 Brown, M. S., 14
 Brown, S. M., 2576
 Browning, J. A., 6095
 Brózik, S., 3129, 4874
 Bruce, R. R., 4177
 Brücher, H., 925-7, 2705, 3358, 4556, 4569, 4578, 4595
 Brückner, F., 6272, 6274-5
 Brudnaja, E. A., 2075
 Brudnaya, *see* Brudnaja
 Brudzyński, A., 5346
 Bruehl, G. W., 1978, 6081
 Brummer, V., 1103
 Brun, L. H., 4050
 Bruni, B., 1370
 Bruni, O., 3849
 Brunori, A., 167, 2217
 Bryzgalov, V. A., 1542, 7053
 Bryzgalova, V. A., 3290
 Bubar, J. S., 879-80, 4504
 Buchinger, A., 5480
 Bucio Alanis, L., 1793-4
 Buck, R. W. (Jun.), 897, 2674, 2701
 Buckner, R. C., 764, 2566, 3787, 4367
 Bučukuri, A. D., 1282, 3126
 Bucur, N., 285, 6943
 Budan, A., 3170
 Budashkina, *see* Budaškina
 Budaškina, E. B., 86, 2047, 2050
 Buddenhagen, I. W., 2105
 Buiatti, M., 3497
 Buishand, T. J., 5157
 Bujmistr, V. E., 5743
 Bukasov, S. M., 4576
 Buker, R. J., 825, 829, 2628
 Bukhari, K. M., 1922
 Bukovac, M. J., 5190
 Bulati, M., 1574
 Bulgakova, T. E., 6975
 Bulin, N. D., 1890-1, 2858, 4709
 Bulin, V. N., 2858
 Bull, T. A., 1066
 Bunesco, D., 3330
 Burceva, G., 5868
 Burdine, H. W., 3297
 Bürger, K., 4388
 Burgess, E. E., 4194, 6215
 Burgos, J. J., 3967
 Burk, J. C., 1443
 Burlakov, M. M., 4652
 Burley, J., 1486-7, 5082, 5106, 6954, 6983, 6988
 Burnett, R. H., 3057
 Burnham, M., 5183
 Burns, R. E., 4397
 Burrage, L., 5429
 Burrell, A. B., 6798
 Burrell, R. G., 2632
 Burrell, W. D., 4048
 Burrows, P. M., 1763, 3229, 6988
 Burrus, P., *see* Burrus, P. H.
 Burrus, P. H., 2566, 3787
 Burt, E. A., 5358
 Burton, G. W., 657-8, 660, 768, 770, 2450, 2597, 4258, 4374, 4392
 Burton, W. G., 4574, 5359
 Buryj, D. I., 3018
 Busbice, T. H., 2614, 2623, 4461, 4470, 4485, 6423
 Busch, L. V., 4591
 Buşilă, A., 3369, 7176
 Butănescu, G., 3188
 Butani, D. K., 4663
 Butany, W. T., 4649
 Butenko, R. G., 6685
 Butler, E. E., 5930
 Butler, L., 3328
 Butnaru, G., 6026, 6032
 Butnaru, H., 7089
 Butterfass, T., 4717, 6634
 Buttin, G., 3535
 Buzacott, J. H., 2816
 Buzanov, I. F., 4721
 Byčenko, A. I., 5819
 Bykovec, A., 5301
 Byrd, M., 4521
 Bystydziński, W., 3117
 Byszewski, W., 877
 Byth, D. E., 1649, 5290, 5292
 CABACCANG, F. R., 257
 Čaban, R., 5224
 Cabanilla, H. L., 1173
 Cabanillas, E., 1123, 4611, 4742
 Cabral, A., 6554
 Cabrera-Juárez, E., 3563
 Căbulea, I., 528, 2326
 Čadova, Ž. S., 5827, 5905
 Cahoon, G. A., 3145
 Cairns-Smith, A. G., 5410
 Caldecott, R. S., 32, 2223
 Calderoni, A. V., 2711
 Caldwell, B. E., 1649, 3404-5, 7161
 Caldwell, R. M., 447, 452, 2201, 2412-3
 Calistr, G., 1372, 6935
 Callahan, R. Z., 1396, 1417, 1438
 Callan, H. G., 5369
 Calò, A., 1381, 1390, 3163, 3173, 3189, 3192
 Calov, J., 2244
 Calvori, C., 106
 Cămara, A., 380, 3580, 3962, 5584
 Camargo, L. de S., 1513, 4990, 7020
 Cameron, J. W., 595, 1289, 2017, 3057
 Campagna, E., 2670-1
 Campbell, A. I., 3002
 Campbell, C. W., 1270, 3045, 4946
 Campbell, I., 5346
 Campbell, J. A., 5116, 5240, 5255
 Campbell, J. B., 536
 Campbell, J. H., 5562
 Campbell, W. F., 4209, 4215
 Campbell, W. V., 1630, 4461
 Camper, H. M. (Jun.), 7095
 Cankov, B., 3185
 Cannon, H. B., 6498
 Canova, A., 1361
 Canova, P., 1451
 Cantele, A., 4460
 Capella, J. A., 6985
 Capitaine, J., 1305
 Cappelleri, G., 3189
 Cappellini, R. A., 5961
 Caputa, J., 523
 Carapkin, L. S., 103
 Carballo, F. P., 2837
 Cárdenas, M., 2672
 Cardinali, A., 670
 Carenko, Je. G., 6004
 Carleton, A. E., 1979
 Carlone, R., 6931
 Carlson, C. E., 5051
 Carlson, I. T., 965, 4354, 6375
 Carlson, R. F., 6851
 Carlton, B. C., 3557
 Carlton, C. C., 4930
 Carmer, S. G., 470, 2398
 Carnahan, H. L., 4477, 6420
 Carnaúba, T. T., 6885
 Caro, J. C. de, 3451
 Carr, A. J. H., 1868, 1878
 Carrasco, P., 1063
 Carson, H. L., 3538
 Cartechini, A., 4577
 Carter, F. L., 2778
 Caruso, P., 4524
 Carvalho, A., 1161-2
 Carvalho, H. P. de, 4522
 Casady, A. G., 5531
 Casarini, B., 1557
 Caspar, A. L., 15, 3498
 Cassalet-Dávila, C., 4190
 Cassandro, M., 3444
 Cassino, A. A., 6949
 Castelain, C., 3019
 Castellani, E., 1407
 Castelli, T., 7227
 Castello, W. J., 6689
 Castillo, A. E., 2778
 Castillo Z., J., 6713
 Castronovo, A., 3364
 Catchside, D. G., 3543, 3551, 3554
 Catelly, T., 930
 Catlin, P. B., 3008
 Catrina, E., 6753
 Čaudarov, G., 2420
 Cauderon, Y., 2180
 Cavaleri, P. A., 1021
 Čavdarov, G., 550-1, 668, 4264
 Cave, C. T., 2729
 Caviness, C. E., 340, 1653
 Ceapoiu, N., 1040, 2798
 Čehanovskaja, N. A., 650
 Čehomskaia, V. M., 6515
 Celton, L., 2492
 Cenov, A. S., 4006
 Cenoz, H. M., 2458
 Cepenko, A. A., 356
 Čercvadze, N. G., 3155
 Čeredničenko, V. N., 3593
 Čeremisinov, N. D., 5925
 Čeremisov, B. M., 3430
 Čerevatenko, A. S., 6849
 Čerkovskij, V. I., 1137
 Černeckij, A. I., 582
 Černescu, E., 4934
 Černescu, L., 420, 2255
 Černiauskas, H., 2553, 4356
 Černikova, M., 900, 4568, 4584
 Černjauskas, G., *see* Černiauskas, H.
 Černoalova, V. P., 1281
 Černyj, I. V., 101, 2042
 Černý, J., 1254, 3814, 4170
 Černyševa, S. P., 985
 Červakov, D. P., 5807, 6696
 Češmedžiev, I., 1223
 Česnokov, P. G., 5662
 Cetas, R. C., 890
 Chabrolin, R., 701
 Chaganti, R. S. K., 533
 Chaiwat Chandrasrivongs, 2742
 Chakrabarti, N. K., 742
 Chalam, G. V., 1746
 Chamberlain, D. W., 7171
 Chambers, A. Y., 1671
 Chambliss, O. L., 7069
 Chand, J. N., 6749, 7123
 Chandler, C., 5048, 7009
 Chandler, R. F. (Jun.), 2536, 2543

Chandola, R. P., 2163
 Chandrakant Kulkarni, 3263
 Chandrasekera, L. B., 4833
 Chandwani, G. H., 738
 Chang, C.-C., 21, 6349
 Chang, C.-C., 4114
 Chang, E.-Y., 4747, 6675
 Chang, J. H., 709
 Chang, S.-T., 2781
 Chang, T. T., 731, 1849, 3718-9, 4297, 6356
 Chang, W. L., 713, 741
 Chao, C.-H., 642
 Chapman, L. S., 3361
 Chapman, V., 378-9, 3935, 3959
 Chapman, W. H., 2572
 Chapot, H., 1287, 4940
 Charles, A. E., 1317
 Charles, A. H., 4351
 Chase, S. S., 549, 552
 Chatterji, A. K., 5134
 Chaudhari, H. K., 1743
 Chaudhuri, B. B., 4685
 Chaudhury, M. A., 1935
 Chaugale, D. S., 2338
 Chauhan, G. S., 4639
 Chauhan, S. V., 3970
 Chavan, V. M., 1843, 2338, 7112
 Chavarriaga, M., E., 4129
 Chavda, D. H., 4441
 Chavdarov, *see* Čavdarov
 Chaverra, H., 821
 Chavez Ruiz, S., 6207
 Chedda, H. R., 2587
 Chen, C.-C., 739
 Chen, C.-F., 1001
 Chen, C.-H., 681
 Chen, H.-R., 3591
 Chen, J.-S., 1054
 Chen, M.-C., 740
 Chen, M.-J., *see* Chen, M.-C.
 Chen, R.-S., *see* Chen, J.-S.
 Chen, W.-C., 344
 Chen, Y.-C., 735
 Cheng, S.-C., 697
 Cheng, Y.-W., 1652
 Cherest, H., 3440-1
 Cherewick, W. J., 6278
 Cherian Jacob, K., 5006
 Cherny, *see* Černý
 Chetan Swarup Paracer, 6060
 Chi, C. C., 820
 Chi, K.-R., 4102
 Chiang, C., 699
 Chiang, H.-C., 2806
 Chiang, H.-J., 1709
 Chiang, H.-K., 686
 Chiang, H.-S., 1728
 Chiang, M. S., *see* Chiang, M. S.-M.
 Chiang, M. S.-M., 6313, 6315
 Chiang, P.-S., 2806
 Chiba, A., 2544
 Chiba, O., 1418, 3225
 Chicco, G., 2014, 2022
 Chien, C.-C., 739
 Chien, C.-K., 947
 Chien, L., 2467
 Child, J. J., 6524
 Childers, W. R., 774, 4468
 Childs, L., 1256
 Chilton, S. J. P., 6596, 6613
 Ching, S.-Y., 1647
 Chinn, J. T., 7124
 Chinoy, J. J., 3917
 Chinwuba, P. M., 2360

Chira, E., 1490-1, 6995-6
 Chirilă, C., 5174
 Chirilă, R., 4137
 Chirilei, H., 4932
 Chirkovsky, *see* Čirkovskij
 Chisci, G. C., 852, 3668, 5473-4
 Chiu, T.-F., 4330
 Chmielewski, T., 3637-8, 5200, 7101
 Cho, *see* Chyo
 Cho, S.-K., 3071
 Ch'oi, H.-O., 2499, 2515-6, 2530-1, 2537, 2546
 Chopra, V. L., 3946
 Chorny, *see* Černý
 Choudhury, B., 1053, 3250, 4687
 Choudhury, M., 2487
 Choudhury, M. R., 1042, 2805
 Choudhury, P. C., 1048
 Choyce, M. A., 6544
 Christen, R., 7151
 Christensen, C. M., 430
 Christensen, J. J., 587
 Christensen, J. V., 1279
 Christie, B. R., 2567
 Chroboczek, E., 2906, 3331, 3635
 Chu, C.-T., 1302
 Chu, P.-J., 509
 Chu, Y.-E., 3721-3, 3729
 Chuang, N.-T., 4317
 Chung, H. W., *see* Chyeng, H. U.
 Churová, K., 4002
 Chyeng, H.-U., 2145
 Chyeng, P.-C., 2550
 Chykowski, L. N., 6082
 Chyo, T.-H., 3071
 Cicin, N. V., 236, 268-270, 2037, 3514, 5991
 Čigrin, V. V., 5860
 Cihanoški, N. S., 4989
 Ciklev, G., 1190
 Cikov, D. K., 4749
 Cikova, E., 1453, 4424
 Cimponeru, N., 1040, 2798, 6031
 Činčura, F., 6398
 Cinda, K. I., 2765
 Ciobanu, I., *see* Ciobanu, I. R.
 Ciobanu, I. R., 1473, 5063
 Ciofu, A., 4125, 4137
 Ciorlăuș, L., 2326
 Cireașă, E., 6807
 Cireașă, V., 6807
 Čirkov, Ju. I., 2384
 Čirkova, E. I., 3947
 Čirkova-Đordievska, M., 6727
 Čirkovskij, V. I., 2087
 Cirulli, M., *see* Cirulli, M. P.
 Cirulli, M. P., 1594-95, 5230, 7122
 Cižkov, L., 3311
 Čkanikov, D. I., 5882
 Clamot, G., 4051
 Clare, B., 6540
 Claringbold, P. J., 684
 Clark, R. A., 2847
 Clark, R. V., 2156, 4252
 Clarke, C. H., 1733, 5347
 Clayberg, C. D., 3328
 Clayton, J. E., 4625
 Clegg, J. B., 5389
 Cleij, G., 6636
 Clement, W. M., 4483
 Clemmer, B. A., 18, 48
 Cleveland, R. W., 824
 Clewell, A. F., 869, 2654
 Clifton, C. E., 3428
 Clinch, P. G., 6804

Coats, R. E., 3780
 Cobianchi, D., 2979
 Cochran, D. E., 4152
 Cockerham, C. C., 495, 2874, 3589, 3577
 Coe, E. H. (Jun.), 2342, 2369
 Cogălniceanu, L., 3179
 Cohan, S. M., 1511
 Coit, J. E., 6866
 Cojocoru, C., 6210
 Colavitto, V., 1304
 Cole, C. S., 4600
 Cole, H., 4421
 Coleman, E. A., 835
 Coleman, O. H., 2824, 3764
 Coleman, R. E., 2826
 Collier, J. W., 689
 Collins, D. D., 2607, 4449
 Collins, G. B., 4395
 Colmenares C., S., 2014, 2022
 Coman, B., 5026
 Combrink, M., 6068
 Commandeur, J. C., 5157
 Comoroșan, S., 3562
 Compton, L. E., 2201, 2412-3
 Conger, A. D., 6985
 Connola, D. P., 5054
 Constantin, R. J., 2727
 Constantinescu, G., 6924-6, 6935
 Constantinescu, N., 1242, 3047, 4894
 Contant, R. B., 5188, 5592
 Conte, J. le, 4098
 Converse, R. H., 5003
 Cook, A. A., 1191
 Cook, D. A., 4500
 Cooler, F. W., 7095
 Cooper, C. S., 1980
 Cooper, D., 7220
 Cooper, J. P., 797, 1863, 1871, 1873, 4373
 Cooper, R. L., 1644, 3402-3, 3408
 Cope, W. A., 2656, 3762, 4530
 Copp, L. G. L., 2159
 Corbaz, R., 2882, 6658
 Corbeil, R. R., 1579
 Cordeiro, G. F. L., 310
 Cordner, H. B., 4614
 Cordy, C. B., 1266
 Corgan, J. N., 1563
 Corkill, L., 2573
 Corley, W. L., 7076
 Cornish-Bowden, M. E., 966, 4622
 Cornu, A., 4097
 Corral, A. J., 2589
 Corriols, J., 1951
 Corte, A., 3043
 Cosmin, O., 600, 2335, 2373, 4143, 6136
 Cosmin, S., 1388
 Cosmo, I., 1381, 1390, 3149, 3173, 3192, 6917
 Costache, D., 5283
 Costelloe, B. E., 959
 Cota, A., O., 2356
 Cotea, V., *see* Cotea, V. D.
 Cotea, V. D., 1385, 5027, 6943
 Cott, A. E., 2975
 Cotte, A., 4277
 Coucoli, H. D., 374
 Couey, M., 703
 Couranjou, J., 3023
 Coursey, D. G., 2865
 Courter, J. W., 1194
 Coutinho, M. P., 5033
 Couto, F. A. A., 1509
 Covaci, M., 6638
 Covich, A. P., 6167

- Covor, A., 3229-30, 2463
Cox, D. K., 4101
Cox, J. E., 3119
Cox, R. A. J., 6541
Coyaud, Y., 702
Coyné, D. P., 3373, 3386, 5226, 5271, 7140
Crăciun, T., 4136
Craddock, J. C., 456
Craig, D. L., 1340, 4979, 6888
Craig, J., 4191
Craig, W. F., 515, 2323
Craigmiles, J. P., 711, 4385, 4394
Crane, J. L., 1670
Crane, P. L., 583, 6118-9
Crawford, E. J., 827
Creech, R. G., 573, 598, 3627
Creel, G. C., 2608
Créhu, G. D., 1528
Crescini, F., 4304
Cress, C. E., 3588
Creţan, I., 1285
Crick, F. H. C., 52, 3558-9
Cristea, M., 6180
Cristoferi, G., 2957, 6895
Critchfield, W. B., 1489
Crittenden, H. W., 1670, 1672
Crockett, S. P., 3782
Croes, A. F., 3450, 3600
Cromell, W. H., 6990
Crosby, J. L., 5368
Cross, J. E., 3403
Crowder, L. V., 521
Croy, L. I., 383
Crozier, J. A. (Jun.), 4197
Cruckshank, I. A. M., 1628, 5580
Crumpacker, D. W., 4108, 6194
Cruz, B. P. B., 5232
Cruz, N. D. da, 112
Csányi, V., 3560
Csitkovics, A., 6628
Csöbőnyi, I., 3044
Čučmij, I. P., 4148
Čudnovskaja, A. N., 3971
Cullen, J. C., 2687
Culp, T. W., 1200
Cummins, D. G., 4394
Čurina, L. P., 6495
Curnow, R. N., 4130
Curočnova, N. I., 5665
Curtis, B. C., 381, 2158, 5972
Curtis, D. L., 2456, 2590
Čuvašina, N. P., 6786
Cvelev, N. N., 752
Cvetaeva, I. A., 5725
Cybul'ko, V. S., 4284
Cyplakova, O. D., 6974
Czisler, G., 6210
Czigat, H., 6465
- DADAY, H., *see* Daday, H. V. A.
Daday, H. V. A., 5558-9, 5573-5, 5578
Dade, E., 2640, 4515, 6445
Dadswell, H. E., 6997
Daghir, S., 3624, 5464
Dakshinamurti, V., 6363
Dalas, V., 2208
Dalby, A., 6160
Dale, M. B., 183
Dalianis, C. D., 923
Daljit Singh, 1237
Dalton, L. G., 2754
D'Amato, F., 167, 5512
Dana, S., 3374-5, 5258, 7142-3
Dancel-Antonio, W., 732
- Dang, K., 6322
Daniel, W. H., 4401
Danilina, L. P., 6190
Dankanits, E., 3327
Danke, V., 130
Dankov, T., 531
Danneskiold-Samsøe, C., 4842
Dános, B., 4781, 6721
Dantuma, G., 292
Darby, L. A., 1564
Darova, A. T., 6928-9
Das, B. K., 6590
Das, K. C., 2251
Das, M., 6744
Das, P. D., 16
Dasananda, S., 2500
Daskaloff, C., *see* Daskalov, H.
Daskalov, H., 3636, 5196
Daskalov, S., 1742, 6657
Daškeeva, K. N., 5813-6
Dass, H. C., 4991
Datta, R. M., 1042, 1045-6, 1048-9, 2808, 2902, 4683
Daubeny, H. A., 3103
Daud Ahmad Khan, 1348
Daugherty, D. M., 602
Daugis, M. B., 3040
Davidescu, D., 1388
Davidjan, G. G., 2797
Davidovskij, G. M., 2195
Davidson, D., 160, 1607, 1812
Davidson, L. G., 2814
Davidson, R. A., 180
Davidyan, G. G., 4678
Davie, E. W., 51
Davies, D. R., 3564-5
Davies, F. F., 673
Davies, H., 2565
Davies, H. T., 912, 6478
Davies, I. A. I., 6160
Davies, W. E., 1864, 1874, 4357, 6455
Davis, D. W., 3535, 3372, 7115
Davis, E. W., 3262
Davis, G. L., 5362
Davis, G. N., 887
Davis, J. B., 6217
Davis, J. H., 1640
Davis, M. D., 2013
Davis, R. L., 829, 831, 2616, 2624, 2628, 2663, 4502, 6424-5
Davis, W. E. P., 1981
Davydov, I. S., 6565
Dawson, G. W. P., 3486
Dawson, M. J., 4260
Day, A. D., 465, 4052
Day, P. R., 2106
Dayrit, R. S., 4290
Dayton, D. F., 2995-6, 6821
D'Crúz, R., 5238
De, D. N., 54, 1850, 5259, 5265
De, T. K., 4683
Deakin, R. J., 679
Dean, C. E., 2871, 6679
Dean, J. L., 2824
Dearborn, C. H., 886
Debabrata Mukherjee, 3402
Debaecke, N., 7057-8
De Baets, A., 6659
Debelyj, G., 5301, 5305
Debrett, P. H., 371
Decker, H. F., 804
Decourtye, L., 4845
De Datta, S. K., 4290
Degraeve, N., 1821, 3481, 4232, 5404
Degras, L., 4068
- Deidda, P., 3059
Deken, R. H. De, 1730
Dekov, L., 1384
Delbrück, M., 3530
Delčev, G., 4819
Delčev, I. V., 999
Delčev, *see* Delčev
De Leo, P., 5231
Delgado, E., 4446
Del Gaudio, S., 1304
Delhove, G. E., 3842, 5605
Delipavlov, D., 3079
Delipavlow, D., *see* Delipavlov
Deltschew, *see* Delčev
Demčenko, T. I., 5811
Demčenko, V. Je., 2084, 2299
Demchenko, *see* Demčenko
Demerec, M., 41, 3529
Demidović, A. F., 4554-5
Demkin, A. P., 1032
Demkiv, O. G., 5699
Dempsey, A. H., 1192
Dempsey, E., 2350
Dengler, N. G., 808
Denić, M., 5597
Denisen, E. L., 2975
Denisenko, Ja. I., 520
Denisov, P. V., 2141
Denisov, V. F., 2085
Denney, A., 6834
Dennis, B. A., 6447-8
Dennis, R. E., 2421
Deodikar, G. B., 1854
Deonier, M. T., 948
De Ranieri, M., 1352
Der-Karabedian, M. A., 4945
Dermen, H., 5075
Deromedis, N. R., 2397
Dervis-Sokolova, T. G., 3224
Desai, M. K., 2269
Desborough, S. L., 928
Desprez, M., 1112
Desprez, V., 1112
Dessouki, S. M., 648, 3883, 6064
Dessureaux, L., 4487, 4490, 4497-98
De Stanchina, G., 6811
Desvignes, J. C., 3053
Devaux, A. L., 260
de Vaz, C. R., 1506, 4286
Devic, J., 3414
Devreux, M., 1788
De Wet, J. M., 6402
Dewey, D. R., 810-1, 2602, 4453, 6411-12
De Wit, J. L., 2395
Deyoe, C. W., 3986
Dézsi, L., 4344
Dhanvantari, B. N., 1356, 4936
Dhawan, N. L., 1834, 1838
Dhesi, J. S., 4648
Dhesi, N. S., 5136
Dhillon, H. S., 7084
Diachun, S., 855, 3792, 6451
Diaconu, P., 2182, 2415
Diaz B., E., 583
Díaz D., R. O., 4795, 6142, 7160
Díaz Moreno, J., 945
Díaz, P., C., 5277
Dicke, F. F., 2389
Dickson, A. D., 644, 6234
Dickson, M. H., 5143, 7141
Didenko, V. D., 1147
Dierks, W., 4081
Dietz, S. M., 1982
Dijk, G. E. Van, 749

- Dikshit, A. P., 3365
 Dikshit, N. N., 2486
 Dimitroff, *see* Dimitrov
 Dimitrov, D., 4001, 5303
 Dimitrov, I., *see* Dimitrov, J.
 Dimitrov, J., 1176, 4963
 Dimitrov, S., 6311
 Dimitrov, Y., *see* Dimitrov, J.
 Dimitrova-Ruseva, *see* Dimitrova-Ruseva
 Dimitrova-Ruseva, E., 5320
 Dimond, A. E., 941
 Dimov, P., 3398
 Dimova, R., 422
 Dinoor, A., 311
 Dionigi, A., 4454, 4523
 Dionne, L. A., 6509
 Dishlers, *see* Dislers
 Dišler, *see* Dislers
 Dislers, V., 1605
 Divakaran, K., 4436
 Dixit, L. A., 662
 D'jačuk, P. A., 7192
 D'jakov, A. B., 1215
 D'jakov, Ju. T., 4586-7, 5621
 Djokić, A., 3670
 Džubanok, A. G., 109
 Djupin, A. E., 2178
 Djutin, K., 1545
 Džyachuk, *see* D'jačuk, P. A.
 Do, J. Y., 2989
 Dobben, W. H. van, 4065
 Dobelmann, J.-P., 2496
 Dobie, N. D., 1362
 Dobrescu, C., 6960
 Dobrjanskaja, M. V., 5880
 Dobrovol'skij, B. V., 256
 Dodds, K. S., 1677, 2695
 Dodov, S. N., 5852
 Doering, G. R., 7106
 Doggett, H., 666, 669, 5530
 Dogra, P. D., 5108, 6959
 Dogramadžjan, A. D., 6945
 Dohnal, T., 6916
 Dokuchayeva, *see* Dokučayeva
 Dokučayeva, E. N., 5011
 Dolgi, S. T., 2069, 7147
 Dolgikh, *see* Dolgi
 Doling, D. A., 290, 2260, 2264, 4023, 6454
 Doll, C. C., 2974
 Doll, H., 4218
 Dollinger, E. J., 2394
 Domańska, H., 3039
 Domon, M., 5337
 Donaubaer, E., 1422
 Dončev, A., 5013
 Doncov, L. S., 1005
 Doney, D. L., 2710
 Donnelly, E. D., 4365
 Donno, G., 3093
 Dormling, I., 4219
 Dorobanțu, N., 4932
 Dorobov, B. L., 5218
 Dorofeenko, G. N., 164
 Dorofeev, A. I., 5993
 Dorofeev, V. F., 284, 2241, 3994, 4045
 Dorofeyev, *see* Dorofeev
 Dorozkin, N. A., 5692, 5712
 Doruchowski, R. W., 1537
 Dorywalski, J., 492
 Dost Muhammad Malik, 1928, 1930-1, 1933, 1941, 1946
 Doty, P., 59
 Dotzenko, A. D., 1983
 Doucet, M., 1040, 2798
 Doucet, V., 1040, 2798
 Doudney, C. O., 62
 Dougherty, R. H., 6812
 Doughty, C. C., 6908
 Douglas, H. C., 3439
 Douglas, W. A., 6216
 Dovganjuk, P. K., 2920
 Dovrat, A., 6433
 Downes, R. W., 6393
 Downey, R. K., 3632
 Doyle, G. G., 17
 Dozier, W. A. (Jun.), 4930
 Drăcea, A. E., 6059
 Drăcea, I., 2237, 6026, 6031-2
 Dračkova, L. I., 4732
 Dragavcev, V. A., 1440, 3575
 Drăghici, L., 2406
 Dragomir, L., 918
 Dransfield, M., 958, 2742
 Drapau, G. R., 3557
 Draper, A. D., 6752
 Dreosti, I., 2395
 Driessche, M. van den, 2438
 Driscoll, C. J., 2167, 5994
 Driver, C. H., 1431, 1433
 Driver, C. N., 2025
 Drjagina, I. V., 87
 Drolsom, P. N., 4353, 4381
 Dronamraju, K. R., 1752
 Dropkin, V. H., 2934, 7119
 Drozdovskij, E. M., 5790
 Dryagina, *see* Drjagina
 Drzas, E., 6699
 Duarte, R., 1625
 Duarte, R. A., 7137
 Dubetz, S., 2435
 Dubey, D. K., 1033, 1205
 Dubinin, N., *see* Dubinin, N. P.
 Dubinin, N. P., 88, 132, 136-7, 190, 1608, 1818, 3512, 5426
 Dubinin, P. A., 6623
 Dubljanskaja, N. F., 4801
 Dudáš, F., 6045
 Dudek, M., 6650, 6680, 6694
 Dudley, J. W., 4502, 6152
 Dufournet, R., 6326
 Dugle, J. R., 1459
 Duich, J., 4421
 Duke, P. L., 5298
 Dukes, P. D., 1314
 Dulieu, H. L., 1142
 Dumanović, J., 5597
 Dumitras, L., 436
 Dumitrescu, E., 3193
 Dumitrescu, N., 7136
 Dumont, C., 2454, 2491
 Duncelman, P. H., 4697
 Dunin, M. S., 1611, 3844, 5875
 Dunleavy, J. M., 3406
 Dunlop, D. W., 1811
 Dunn, G. M., 778
 Dupuy, P., 5345
 Đurđević, B., 6867
 Dušchin, I., 6948
 Dutta, A. K., 4332
 Duvick, D. N., 1749
 Dvorjankin, F. A., 5595
 Dvornic, V., 6946
 Dvornikov, P. I., 6008, 7024
 Dwivedi, H. N., 1899
 Dyck, P. L., 2290, 4032
 Dyson, W. G., 5099, 5532
 Džafarov, D. F., 7053
 Džalilova, V., 6890
 Džamić, M., 6867
 Džamić, R., 1253
 Džanikulov, F., *see* Džanikulov, F. B.
 Džanikulov, F. B., 2065, 2760
 Džindžihadze, Z. P., 4176
 Džubenko, L. K., 1034, 6765
 Džuraev, M., 4658
 Džubenko, *see* Džubenko
 Eaton, G. W., 4891
 Eaton, N. R., 7219
 Ebeltoft, D. C., 2279
 Eberhard, D. L., 2538
 Eberhart, S. A., 495, 2311, 2332
 Ebert, W. W., 4812
 Echandi, E., 7138, 7151
 Echenagusia, J., 818
 Eckess, E. D., 2291
 Écochard, R., 161
 Édel'stein, V. I., 5115
 Edreva, A., 6660
 Edreva-Kandova, A., 5628
 Edwards, K. J. R., 6390
 Edwards, L. H., 350
 Edye, L. A., 5291
 Edmenko, M. D., 2380
 Efimenko, T. M., 4033, 5644
 Efremenko, P., 4597
 Efremenko, T. S., 2712, 5691
 Efremova, V. V., 4808
 Eftimie, E., 6960
 Egerer, A., 4746
 Egikjan, A. A., 2334, 5975
 Egorova, L. I., 5706
 Egresy Grábner, E., 6432
 Ehara, K., 2557
 Ehrenberg, L., 612, 631, 1817, 2129, 4221, 5111, 7186-7
 Eide, C. J., 6525
 Eighes, *see* Eiges
 Eigner, J., 58
 Einspahr, D. W., 1456
 Eizenberga, V., 5321, 6173
 Eiges, N. S., 354-5, 2045
 Ejzenberg, L., 7185
 Ejzenberga, V. T., *see* Eizenberga, V.
 Ekberg, I., 4233, 5111
 Elandt-Johnson, R. C., 2860
 Eldin, S. B., 3771
 El-Ebrashy, M. F., 3673, 5477
 Eleckaja, L. E., 5794
 El-Fadl, M. A. A., 3673, 5477
 El-Haddad, M. M., 494
 Elias, F. D., 2154
 Eliason, E. J., 5053
 Ellerström, S., 4513
 Elling, L. J., 4486
 Ellingboe, A. H., 647, 1708
 Elliott, F. C., 833, 4467
 Elliott, J. C., 5421
 Ellison, J. H., 1516, 7034
 El-Rouby, M. M., 2386
 El-Sadek, L. M., 4222
 El Saeed, E. A. K., 5252
 El Sayed, M. N. K., 7098-9
 El-Shama, W. S., 2153
 El Sharkawy, A. M. A., 5983
 Elson, D., 55
 El'suni, K. A., 353, 629
 Emeis, C. C., 5339
 Emery, D. A., 1306
 Ėmindžanov, B., 987
 Ėmmerih, E. D., 3985
 Ėmmerikh, E. D., *see* Ėmmerih, E. D.
 Enăchescu, G., 2908, 3330-31

Enčev, Ja., 2098, 2429, 5603
 Enchev, Ya., *see* Enčev, Ja.
 Endo, T., 2370, 3733, 5161
 Endrizzi, J. E., 2755
 Ene, P., 3179
 Engel, R. E., 4404-8
 England, A. B., 3057, 3063
 England, F., 6391
 Engle, R. L., 7031
 Engsbro, B., 2149, 4605
 Enikeev, H. K., 1274
 Enken, V. B., 2040
 En'kova, E. I., 3214
 Enns, Harry J., 3758
 Enokida, E., 5327
 Enríquez C., G. A., 2020, 6718
 Enríquez, G., *see* Enríquez, C., G. A.
 Ensign, R. D., 2618
 Entchev, *see* Enčev
 Enzie, J. V., 3146
 Ephrat, J., 416
 Ephrussi, B., 3446-47
 Ephrussi-Taylor, H., 71
 Epps, J. M., 1671
 Erb, K. L., 1629
 Erdtman, G., 5357
 Erdtman, H., 5100
 Eremeeva, N. E., 5037
 Erenburg, P., 6503
 Ergabulov, Ž., 989
 Erickson, H. T., 6897, 7098-9
 Ericsson, E. G., 90
 Eriksson, G., 2129, 5111
 Eriksson, T., 3597
 Ernazarov, M. A., 4266
 Erohina, S., 900, 5895
 Erwin, D. C., 836, 4660
 Eşanu, V., 5846
 Eşanu, *see* Eşanu
 Escuro, P. B., 6361
 Esenbaev, N. H., 1077
 Ešenova, H., 6832
 Esipova, Z. I., 1566, 2071
 Eskilsson, L., 2636
 Esposito, M. S., 3499
 Esposito, R., 3500
 Esposito, V. M., 2632
 Esquivel, O., 2019, 2021
 Essad, S., 2578, 3594
 Esser, K., 1707-8
 Essman, R. H., 1764
 Estes, L. W., 3386
 Etasse, C., 2445
 Ethirajan, A. S., 1068, 2822
 Ettlinger, L., 7209
 Etzel, W. W., 7114
 Evans, A. M., 3646, 5441
 Evans, E. P., 6900
 Evans, J. L., 6516
 Evans, K. H., 2616
 Evans, K. O., 2525
 Evans, L. E., 1104
 Evans, P. K., 7030
 Evdokimov, M., 910, 7016
 Everson, E. H., 456
 Ewens, P. M., 1768
 Ewens, W. J., 1768, 1778
 Eyal, Z., 5961
 Eynard, I., 3036, 6942
 FABIG, F., 7107
 Fadeeva, T. S., 1347, 6899
 Fadeyeva, *see* Fadeeva
 Fadrhons, J., 4010, 6273
 Fairbrothers, D. E., 3485
 Faiza Mohamed El-sayed Hassan, 6539
 Fajkowska, H., 2906
 Faludi, B., 946
 Faludi-Daniel, Á., 6179
 Fanguy, H. P., 2818, 2834
 Fankhauser, F., 2962
 Farka Riedel, L., 4782
 Farmer, R. E., 5069
 Farrar, R. F., 1183, 6776
 Farrell, E. P., 3983, 3986
 Fast, R., 5271
 Fathi, S. M., 586
 Faulkner, G. J., 7064
 Faulkner, R., 5040, 5042
 Faulkner, R. C., 957, 2735
 Faust, N., 2372, 2611
 Favarger, C., 5436
 Favret, E. A., 3890
 Fazal Haq, 6591
 Feaster, C. V., 982
 Fechner, G. H., 7005
 Fedak, G., 2609
 Fedin, M., 3922
 Fedorenko, V. O., 5657
 Fedorenko, V. S., 5614
 Fedorov, A., 7194
 Fedorov, A. K., 3901, 4171
 Fedorov, V. S., 6112
 Fedorova, T. N., 339, 343
 Fedorova, V. A., 5641
 Fedoseeva, Z. N., 5612-3
 Fedotova, T. I., 1027, 2718, 5832, 5845
 Feeke, W., 3864
 Feenstra, W. J., 5395
 Fehr, W. R., 3406, 7163
 Fehrmann, H., 936
 Feistritz, W. P., 3858, 3885
 Fejer, S. O., 784, 2648, 3805, 4350
 Feldman, M., 342, 377, 2213, 2216
 Felecan, V., 6494
 Feller, W., 5407
 Fenaroli, L., 553, 4111
 Feng, C.-H., 1158
 Ferguson, V. L., 499, 571, 574
 Ferguson, D. B., 677
 Fernández Valiela, M. V., 5936
 Fernando, D. M., 4832, 4834
 Ferraris, I. P., 6598
 Ferrary, R., 620
 Ferreira Sobral, E. F., 327, 490, 2012
 Ferrell, W. K., 5113
 Fesenko, N. V., 3889
 Festić, H., 3015
 Fick, G. N., 645
 Ficsor, G., 3470
 Fiddian, W. E. H., 3862-3
 Fidler, J. C., 6810
 Fields, M. L., 3335
 Figueras, C., 173
 Figueroa R., M., 2016
 Filatov, N. S., 3180
 Filatova, I. T., 5746
 Filion, W. G., 2567
 Filip'ev, I. D., 3987
 Filippov, A. V., 5885
 Filippov, D. I., 4583
 Filippova, L. M., 145
 Filippova, N. I., 6479
 Filippova, O. A., 2072
 Filippova, R. I., 5236
 Filippova, T. N., 5640
 Filippovič, A., 4587
 Filippovič, Ju. B., 6863
 Filosofova, T. P., 3131
 Findley, W. R., 2394
 Finkner, V. C., 472, 474, 3786
 Finney, K. F., 5969
 Firsov, I. P., 6629
 Fischer, H. E., 1085
 Fischetti, G., 3017
 Fisher, H. G., 4966
 Fisher, N., 2230
 Fisher, W. D., 2750
 Fishler, D. W., 1051, 2813
 Fitch, W. M., 5387
 Flach, M., 4784
 Fleischmann, G., 2289
 Fleming, A. A., 536
 Fletcher, A. M., 5040
 Fletcher, D. L., 3464
 Flores-Reyes, I., 1586
 Florov, B. P., 2958
 Focke, R., 2354
 Foddai, A., 3064
 Foja Singh, 2903
 Foka, M. I., 5744
 Foltín, J., 5949
 Foltýn, J., 6053
 Fomickij, N. I., 5950
 Fomin, L. A., 5681-2
 Fong, J. H., *see* Feng, C.-H.
 Fonseca M., S., 5963, 6019
 Fontenot, J. F., 2015, 2675
 Foote, W. H., 1979, 1988, 6231
 Forbes, I., 875, 3763, 4372, 4397-8
 Ford, A. W., 6609-10
 Ford, R. N., 4711
 Forer, A., 154
 Forsberg, R. A., 2277
 Forshell, W. P., 1402
 Forsyth, W. G. C., 1363
 Forte, A., 4958
 Fosberg, F. R., 1193
 Foschi, S., 2957
 Foster, A. E., 6233
 Foster, R. B., 4425
 Foster, R. E., 7070
 Fothergill, P. G., 6524
 Fouët, M., 4978
 Fox, M. S., 69
 Fracassini, D. S., 6895
 Fradkin, L. I., 6179
 Fradkina, D. L., 5793
 Frahm-Leliveld, J. A., 4542
 Frakes, R. V., 6394
 Frame, J., 6444
 Frampton, V. L., 2778
 Franceschetti, G. M., 2637
 Francis, C., 2646
 Francois, L. E., 2847
 Frandsen, K. J., 857
 Frandsen, N. O., 6510
 Frankel, O. H., 5546-7, 5563
 Franklin, I. R., 5373, 5551
 Franklin, J. F., 1489
 Frätilä, E., 6946
 Frazier, W. A., 1631, 3372
 Frecha, J. H., 5959
 Frederiksen, R. A., 6364
 Freese, E., 129, 5388
 Freese, E. B., 5388
 Freire, J. R. J., 817, 1665
 Freshwater, I. T., 6611
 Frey, K. J., 462, 467, 6090, 6095, 6104
 Freyre, R. H., 6770
 Frezzi, M. J., 4282, 4969
 Fridmann, M., 4770
 Friesen, G., 3857
 Friesen, H. A., 2110, 3854-5
 Frimmel, F., 43

- Fritsche, G., 1736, 5351
 Fritz, H. G., 3572
 Froberg, R. C., 2274
 Fröhlich, H. J., 3211
 Frolova, L. V., 6685
 Fronek, F. R., 901
 Fröst, S., 483, 485, 4680
 Fry, B. O., 3148
 Frydenberg, O., 4225
 Frydrych, J., 5125
 Fu, H.-C., 1055
 Fuchinoue, H., 4761
 Fuchinoue, Y., 4761
 Fuchs, E., 288, 321, 1984, 6071
 Fujie, K., 3268
 Fujii, T., 2186, 3741-2, 3964, 5997, 6027
 Fujiwara, H., 4348
 Fulton, R. W., 2961
 Funk, C. R., 4402-8
 Funsch, R. W., 7005
 Furber, M. J., 4211
 Furnival, G. M., 1486, 5082, 6983
 Fursov, V. N., 998, 2068
 Fürste, K., 1086, 6630
 Fürste, W., 6630
 Futrell, M. C., 2472-5
 Futsuhara, Y., 4331
 Fuzatto, M. G., 1021
 Fyfe, J. L., 3367

 GABELMAN, W. H., 7031
 Gáborčík, Š., 5498
 Gabriel, W., 6534
 Gabriel, W. J., 4741
 Gačėčiladze, T., 2988
 Gachet, J.-P., 2556
 Gadd, I., 4294
 Gadea, M., 3904
 Gadžiev, D. A., 3920, 5981
 Gajvoronskaja, Z. I., 3177
 Gajybov, I. M., 2359
 Gálábóv, S., 2875
 Galan, C., 2664, 3362
 Galeev, G. S., 502, 1888, 3515
 Galicinskij, P. K., 4656
 Galil, J., 6859
 Galinat, W. C., 6221
 Gališnikov, A., 5211
 Gallagher, E. C., 3381
 Gallander, J. F., 2985, 3112
 Gallegly, M. E., 1629
 Gallo, D., 4707
 Gallun, R. L., 456, 2201, 6282
 Galstjan-Avanesjan, S. H., *see* Kalsdyan-Avanesyan, S. Kh.
 Gamietea, R. E., 3046, 3048
 Gams, H., 7236
 Gan, A. I., 1019
 Gančev, P., 1453, 5066, 6968
 Gančev, *see* Gančev
 Gandhi, S. M., 3977
 Ganesh Prasad, 364
 Ganga Prasad Rao, N., 1837
 Gangstad, E. O., 2588, 2594
 Ganguly, D., 738
 Garatuza G., M., 3310
 Garber, E. D., 6854
 Garber, M. J., 6886
 Garbuzova, D. A., 2901
 García, J. L., 1596
 Gardner, C. O., 2356, 4279, 6149
 Garen, A., 3569
 Garing, A. L., 1062
 Garioch, D., 3361

 Garrido, T. G., 4669
 Garrison, C. S., 4515
 Gartner, A., 2624
 Garza-Chapa, R., 1036
 Gasanenko, A. Ja., 2151
 Gasanov, M. R., 5904
 Gasanov, Š., 5198
 Gascon, J. P., 1221
 Gaskin, T. A., 762-3
 Gašpar, A., 3562
 Gataulina, G. G., 4533
 Gates, C. T., 682
 Gatina, È., 5772
 Gatlin, L. L., 5384
 Gaul, H., 617, 2125, 4224, 4234
 Gautheyrou, J., 1060
 Gauthier, F.-M., 1975
 Gautreau, J., 1312, 4967-8
 Gavazzi, G., 2313
 Gavrilenko, V. N., 517
 Geisler, G., 4756
 Geissler, E., 53
 Gelin, O., 7185, 7186, 7187
 Gelinas, D. A., 538
 Genčev, G., 4113
 Genčev, S., 1555
 Genest, K., 6764
 Gent, G. P., 7195
 Genter, C. F., 541, 2357, 4158, 6117, 6139
 Gentry, H. S., 6593
 Genys, J. B., 3233
 George, D. W., 424, 1985
 George, E. F., 2817, 2825
 Georgescu, C. C., 5063, 6960
 Georgescu, M., 1366, 1388, 2664, 5174
 Georgiev, H., 2876
 Georgiev, T., 916, 1278, 4183
 Georgiev, V., 4924
 Georgieva, R., 5216
 Georgieva-Todorova, J., 4806
 Georgieva-Todorova, Y., *see* Georgieva-Todorova, J.
 Georgievskaja, N. A., 5853
 Georgopoulos, S. G., 3300, 7068
 Gerasenkov, B. I., 4122, 4162
 Gerasenkova, E. D., 5729
 Gerasevič, E. G., 3094
 Gerasimenko, I. I., 2060
 Gerasimov, N. G., 7131
 Gerechter-Amitai, Z., *see* Gerechter-Amitai, Z. K.
 Gerechter-Amitai, Z. K., 300, 311, 416
 Gerhold, H. D., 1406-38, 5052
 Gerlach, D., 1337
 Gerlach, W., 6691
 Germ, H., 5488
 Gerstel, D. U., 2878
 Gešle, È. È., 4737, 5611, 5635, 5655
 Getov, G., 1378, 3190, 5036
 Getow, *see* Getov
 Ghabrial, S. A., 1589
 Ghaffar, M. A., 1925
 Ghai, G. L., 81
 Chatnekar, M. V., 545-6
 Ghena, N., 1276, 4932, 4934
 Gherghi, A., 3024
 Gherman, M., 6940
 Gherman, N., 5031
 Ghezzi, G., 6687
 Ghidoni, A., 2367
 Childyal, B. P., 2541
 Ghosh, A. K., 2506-7
 Ghosh, A. N., 776
 Ghosh, B. N., 2487, 4318

 Ghosh, M., 4325
 Ghosh, R. B., 2938
 Ghousuddin Ahmed, 6933
 Ghufuran, S. M., 4332
 Giacometti, D. C., 1332
 Gian Singh, 6287, 6288
 Giardini, L., 4145
 Giatgong, P., 6364
 Gibson, A. H., 863
 Gibson, I., 131
 Gibson, P. B., 2641
 Gichner, T., 143, 631, 3579
 Giebel, J., 942, 6528, 6529
 Gierer, A., 49, 3568
 Gikalo, G. S., 2911, 4826
 Gikašvili, K. G., 5786
 Gil, H. C., 6422, 6425
 Gilbert, J. C., 7124
 Gilbert, N. W., 2933
 Gill, B. S., 6289, 6296, 6298
 Gill, G. S., 6289, 6290, 7198
 Gill, H. S., 1580, 3133
 Gill, J. L., 18, 48
 Gill, W. J., 4432, 4507
 Gilles, K. A., 3984
 Gillett, J. M., 2634
 Gillie, O. J., 76
 Gillois, M., 1766
 Gilobert, V. M., 6949
 Gilmore, R. A., 1719
 Giménez-Martín, G., 1810, 1825
 Ginns, J. H. (Jun.), 1433
 Giorgi, B., 2214, 2217
 Giorgobiana, E., 2987
 Giosan, N., 2199, 3702
 Giovanardi, R., 4172
 Girard, J. M., 4499
 Gitman, L. S., 5913
 Giulivo, C., 1390
 Gjul'ahmedov, H. O., 3698
 Gladina, L. F., 2771
 Gladkova, V. N., 6831
 Gladstones, J. S., 4520
 Gladyševa, N., 4558
 Gladyševa, O. M., 4012
 Glass, R. L., 2405
 Glazyčeva, I. V., 5594
 Gledhill, D., 6405
 Glendinning, D. R., 1167, 1175, 4778, 6717
 Glits, M., 5275
 Glonti, N. T., 6857
 Glover, D. V., 839
 Gluhovceva, N. I., 5649
 Gluščenko, I. E., 1522, 1806
 Glushchenko, *see* Gluščenko
 Gmelig Meyling, H. D., 4065
 Gnitko, I. G., 5683
 Gocho, H., 2411
 Goculjak, V. D., 5844
 Goddard, R. E., 1434
 Goddard, R. J., 3767
 Godeck, W., 2627, 6442
 Godnik, A., 1078
 Goethe, J. W., 112
 Goian, M., 6059
 Goidanich, G., 6903
 Gol'dat, S. Ju., 7210
 Goldat, S. Yu., *see* Gol'dat, S. Ju.
 Goldberg, A., 61
 Goldenberg, J. B., 3364
 Goldin, E., 1310
 Goldschmidt, E., 4861
 Golev, I. F., 1093
 Goliadze, S. K., 5785, 6857

- Golodriga, P. Ja., 3150, 3169
 Gologan, I., 2364–5, 7136
 Golovkova, A. G., 3035
 Golubev, A. A., 5728
 Golubev, M. I., 4240
 Golubeva, E. M., 6621
 Golubinskij, I. N., 179, 6413
 Golubovskaia, *see* Golubovskaja
 Golubovskaja, I. N., 349, 5988
 Golubovskaya, *see* Golubovskaja
 Golubovskij, M. D., 5397
 Golyševa, M. D., 5087
 Golyšin, N. M., 2997
 Gombkötő, G., 5028
 Gómez L., J. A., 6205
 Gomma, A., 6064
 Gončarov, N., 4571
 Gončarov, P. L., 3360, 3746, 5526
 Gončarova, A. V., 5526
 Gončarova, E. A., 6850
 Gontjurov, I. M., 2679
 González, A., 3316
 González B., R., 370, 437
 Gonzalez, C. L., 466
 Gonzalez, V., 6981
 González-Fernández, A., 1810, 1825
 González-Ríos, P., 6801
 Goode, M. J., 3343
 Goodgal, S. H., 70
 Gooding, H. J., 1251
 Goodman, M., 543, 4631
 Goodwin, T. W., 6179
 Gopalakrishnan, R., 712, 4326
 Gopal Avengar, A. R., 1857
 Gopinath, D. M., 1132, 1141, 4748
 Gopinath, P., 1852
 Goplen, B. P., 4370, 6467
 Góral, S., 847
 Gorbatenko, L. E., 2682
 Gorbuniv, V. P., 4161
 Gorenberg, Ja. H., 1004
 Gorin, A. P., 5588
 Gorin, V. E., 101
 Gorini, F. L., 6811
 Gorini, L., 1790, 3439
 Gorlač, A. A., 6005
 Gorlenko, M. V., 5253, 5609, 5622–3
 Gorodea, G., 3143, 1387
 Gorodilova, L. M., 5650
 Gorshkova, *see* Gorškova
 Gorškova, L. I., 2085
 Gorškova, L. Z., 6792
 Gorškova, N. S., 5717
 Gorsline, G. W., 579, 1436
 Gorz, H. J., 4371
 Gotlin, J., 6195
 Gostimskij, S. A., 1681
 Gostimsky, *see* Gostimskij
 Goto, K., 5927
 Gottlieb, D., 1705
 Gottschalk, W., 5306, 5311, 7110, 7182
 Goud, J. V., 5996
 Gough, F. J., 440, 446, 2203
 Gould, F. W., 4412
 Goven, M. J., 5945
 Govi, G., 1149
 Govil, S. K., 2768
 Govindasamy, K. N., 4436
 Govindaswami, S., 2507
 Govindu, H. C., 662
 Govorov, P. M., 4552
 Govorova, G. F., 5918, 5919
 Goyal, R. D., 5245
 Gračeva, G. G., 1004
 Gradinarov, L., 5272
 Grafius, J. E., 273, 2285
 Graham, D., 2471
 Graham, J. H., 837
 Grakovskij, P. P., 4226, 6256
 Grama, A., 416
 Granados, V., 6308
 Granchamp, S., 3446–7
 Grancini, P., 3661, 5458
 Granger Z., D., 370
 Grangier, A. (Jun.), 4777
 Grant, C. J., 111, 157
 Grant, W. F., 1461–2, 1823, 2417–8
 Grassia, A., 1254
 Grassl, C. O., 2820
 Graves, C. R., 2006, 2385, 3767
 Gravier, K., 45
 Gray, E., 2657
 Gray, S. G., 5078–80
 Gray, T. C., 71
 Grebenkin, A. P., 5806, 6655
 Grečka, I. V., 5851, 5865
 Grecu, C., 2326
 Grecu, I., 1372, 6935
 Green, C. W., 1999
 Green, D. E., 1655
 Green, D. M., 60
 Green, G. J., 2263, 6107
 Green, J. O., 2589
 Greenberg, E. A., 5421
 Greenblatt, I. M., 6178
 Greene, J. T., 6999
 Greenleaf, W. H., 5213
 Gregg, A. S., 3902
 Gregory, M. P., 3060
 Gregory, W. C., 3060
 Greguss, L., 5076
 Greig, J. K., 3380
 Grekova, N. P., 3826
 Gricenko, R. I., 2081
 Gricyk, N. S., 1105
 Gridi-Papp, I. L., 1021
 Griess, H., 6491
 Griffing, B., 5406, 5548
 Griffith, G., 753, 1896
 Griffiths, A. (Jun.), 1159
 Griffiths, D. J., 783, 1867, 1877, 2563, 2571, 4382
 Grigajte, D. I., 2712
 Grindeland, R. L., 2274, 6095
 Grinenko, A. F., 2966
 Grinenko, V. I., 4734
 Grinev, V. M., 3817
 Grinevič, A. G., 5328
 Grinevich, *see* Grinevič
 Grinvald, C., 2415, 6253
 Grinval'd, K., *see* Grinvald, C.
 Grisenko, G. V., 5676
 Grisjuk, N. M., 6975
 Gritsenko, *see* Gricenko
 Gritton, E. T., 1152
 Grivipa, P., 1702
 Grjuner, A. M., 5759
 Gröber, K., 5203
 Grodzinskaja, G. S., 2855
 Groff, D. W., 7081
 Grogan, C. O., 2376, 6158
 Grogan, R. G., 6730
 Gromova, V. A., 7190
 Gromyko, G. N., 5850
 Gronowska-Senger, A., 3637
 Groot, W. de, 2817
 Gröschner, P., 4893
 Grossman, L., 1786
 Groszmann, H. M., 3381
 Grover, R. K., 7066
 Groves, W. E., 7216
 Gruchow, R., 5599
 Grüneberg, J., 4730
 Gruševoj, S. E., 2886
 Grylls, N. E., 5577
 Gubanov, G. Ja., 5828
 Gubernator, V. S., 7018
 Guenchev, *see* Genčev, G.
 Guengerich, H. W., 1283
 Gueorguiev, *see* Georgiev
 Gueorguieva, *see* Georgieva
 Guerassimoff, J., 4541
 Guerin, P. M., 4058
 Guervin, C., 4816
 Guest, J. R., 3557
 Guglielminetti, R., 3454
 Guillen, G. V., 2440
 Guffez, S. A., 6440
 Gulak, Ju. A., 1139
 Gulamov, M.-K. K., 2066
 Gulati, S. C., 646, 6265
 Gulijev, E. E., 6561
 Guljaeva, E. M., 4174
 Gulkanjan, V. O., *see* Kovlkanyan, V. H.
 Gulubov, *see* Gălăbov
 Gunge, N., 5340, 5344
 Gunn, C. R., 4527
 Gunn, R. E., 965, 2733
 Günther, E., 3556
 Günzl, L., 6962
 Gupta, A. K., 6296
 Gupta, B. K., 4823
 Gupta, H. P., 6168
 Gupta, N., 5999
 Gupta, P. D., 2914
 Gupta, P. K., 1375
 Gupta, S. B., 1136
 Gupta, V. P., 6292, 6294, 6873
 Gurchan Singh, 3426
 Gurcharan Singh, S., 2447
 Gurdon, J. B., 1791
 Gursansky, J. A., 3345
 Gusejnova, M. G., 2427
 Guseva, N. A., 6819
 Guseva, N. N., 1027, 4662, 5831, 5900
 Gustafson, C. D., 6879, 6880, 6886
 Gustafsson, Å., 1393, 4219, 4233, 4294
 Gustafsson, N., 2703
 Guthrie, W. D., 2388
 Gutiérrez G., J., 2023
 Guyer, H., 6385, 6403, 6456
 Guz, A. F., 1037
 Guzman N., J., 937
 Guzman, V. L., 3297
 Gvozdeva, Z. V., 4794
 Gvozdjak, R. I., 5892
 Gvozdjukova, N. I., 6846
 Gwin, R. E. (Jun.), 3380
 HAAS, H., 6447–8
 Haas, J., 1087
 Haasemann, W., 1488
 Habib, A. A., 6581
 Habib-ul-Rahman, 1936
 Hačaturjan, B. M., 3182
 Hackbarth, J., 3664, 5469
 Hacker, J. B., 2273
 Hadder, J. C., 19
 Hadders, G., 3204
 Hadnagy, A., 6345
 Hadorn, E., 3534
 Hadžimuradova, R., 2374
 Hadžinov, M. I., 502, 524, 1888, 2327, 3515, 3520

- Haefner, K., 89, 1716, 5349
 Hafiz, A., 3882, 3884
 Haga, T., 2517, 2542
 Hagberg, A., 6224
 Hagberth, N. O., 6092
 Hageman, R. H., 383, 500
 Hagen, G. L., 1133-5
 Hahn, *see* Han
 Hahn, S. J., *see* Han, S.-C.
 Haigh, J. C., 3240, 5155
 Hajdarkulov, G. I., 3165, 6913
 Hajdú, M., 2709
 Hak, M. G., 730
 Hakim, K. L., 27
 Hakobyan, T. A., 2177
 Halatjan, G. G., *see* Khalatyan, K. K.
 Halder, C., 6475
 Halimova, U. H., 1019
 Halinov, B. B., 5752
 Halisky, P. M., 4404-5, 4408
 Hall, B., 3857
 Hall, D. H., 2392
 Hall, I. V., 1340, 3104, 3111
 Hall, O., 3625, 4091, 5465
 Hall, V. L., 2525, 6357
 Hallauer, A. R., 510, 557, 2332
 Haller, J. R., 1479
 Hallig, A., 4825
 Halloran, G., *see* Halloran, G. M.
 Halloran, G. M., 418, 2240, 2270, 3942-3, 3995
 Halm, A. T., 4328
 Hamann, U., 2720
 Hamatová-Hlaváčková, E., 1666
 Hamdorf, G., 3000
 Hamill, D. E., 6981
 Hamilton, J. R., 572
 Hamilton, K. C., 6373
 Hamilton, K. S., 1363
 Hamilton, R. A., 2017, 3097
 Hammett, H. L., 2727, 3768, 4609
 Hammond, B. L., 4725
 Hammons, R. O., 1311, 1314
 Han, C.-Y., 2533
 Han, S.-C., 3261
 Han, S.-K., 2127-8, 2499
 Hanaoka, A., 162-3
 Hanaoka, T., 3120
 Handoll, C., 4387
 Hangil'din, V., *see* Hangil'din, V. V.
 Hangil'din, V. V., 1686, 2057, 5518, 7189
 Hanna, A. S., 5244, 7135
 Hanna, M. R., 6434
 Hanneman, R. E., 2698, 6496
 Hanover, J. W., 1414, 1477, 5096
 Hansche, P. E., 1795, 3032-3
 Hansen, C. J., 6847
 Hansen, H., 4797
 Hansen, L. A., 1986
 Hanson, C. H., 832, 837, 4466, 6421, 6443
 Hanson, E. W., 856, 4378, 4516, 6450
 Hanson, G. P., 547
 Hanson, J. B., 1661
 Hanson, W. D., 2348, 7161
 Happel, C., 1466
 Haque, M. F., 7126
 Harada, K., 4348
 Harbhaja Singh, 3242
 Hardcastle, J. E. Y., 2524, 4307
 Harding, J., 1632, 5401
 Harding, J. A., 5279
 Hare, W. W., 3821
 Harkess, R. D., 4429
 Har'kova, A. P., 5716
 Harlan, J. R., 771, 2587
 Harmon, F. N., 3160
 Harmon, S. A., 1520
 Harmsen, G. W., 816
 Harn, *see* Han
 Haroon Zai, K. M., 1939
 Harrington, J. D., 4281
 Harris, H. B., 4273
 Harris, R. E., 1296, 6498
 Harris, R. M., 26
 Harrison, B. J., 5160
 Harrison, D. E., 6526
 Harrison, M. N., 2306
 Hart, G. E., 20, 2873
 Hart, M. L. 't., 4430
 Hart, R. H., 770
 Hartley, R. D., 1181, 1184
 Hartmann, F.-K., 7240
 Hartwig, E. E., 1642, 3392, 7159
 Har-Tzook, A., 1310
 Haruna, I., 73
 Harvey, B. L., 6759
 Hasanuzzaman, S. M., 6704
 Hasegawa, H., 4115-6, 4198
 Hashiguchi, S., 3656, 4305, 5452
 Hashioka, Y., 4343
 Haskins, F. A., 4371
 Hassan, M. A., 4965, 6872
 Hassan, S. F., 4027
 Hassanein, S. H., 444
 Hassan El-Sayed Galal, 4629
 Hassan Khalifa, 965, 2733
 Hassebrauk, K., 286, 293, 6070, 6072
 Hassis, F. A., 1326
 Hastie, M. S., 956, 4621
 Hastings, R. C., 914
 Hathaway, W., 6998
 Hattemer, H. H., 1408, 3217, 6964, 6965, 7000, 7003
 Hatton, T. T. (Jun.), 3098
 Haun, C. R., 369, 2204, 6028
 Haunold, A., 2174, 4199
 Haus, T. E., 2158
 Haussmann, G., 2561
 Haut, W. F., 5394
 Hawkes, J. G., 5600, 6506-8
 Hawkins, A., 2692
 Hawkins, B. S., 2793
 Hawkins, R. P., 4427
 Hawn, E. J., 6434
 Hawthorne, D. C., 3439
 Hawthorne, P. L., 3773, 5281, 7155
 Hayama, H., 6102
 Hayase, H., 5182
 Hayashi, J., 6241, 6242, 6266, 6283
 Hayashi, K.-i., 6358
 Hayashi, M., 75
 Hayat Muhammad Bhatti, 1909
 Haydock, K. P., 682
 Hayes, J. D., 1865, 1875, 5244, 6238
 Hayes, W., 177, 3571
 Hayward, M. D., 4355, 6389
 He, H., 2515-6
 Hé, P.-C., 3169
 Heagle, A. S., 479
 Heale, J. B., 3852
 Heard, T. G., 2160, 2207
 Hearn, A. B., 955, 974
 Hebert, L. P., 6608
 Heddle, J. A., 614
 Heddle, R. G., 2552
 Heggstad, H. E., 2869, 2877
 Hegnauer, R., 3462
 Hehn, E. R., 367-9, 2204
 Heichel, G. H., 4167
 Heidrick, L. E., 937
 Heimbürger, C., 1430
 Heinrichs, D. H., 4469, 4473, 4492, 6427
 Heiser, C. B. (Jun.), 1211, 1216
 Heit, C. E., 5054
 Helbæk, H., 5954
 Heller, G., 3533
 Helm, J. L., 499, 571, 574
 Hely, F. W., 2630
 Henain, A. E., 2458
 Henry, A., 2982
 Henry, S. L., 2729
 Henson, L., 855, 3792, 6451
 Hentrich, W., 4220
 Hepden, P. M., 1705
 Hepler, P. R., 7080
 Herbert, L. P., 2818
 Herbert, R. B., 5040
 Heringa, R. J., 1675
 Hermansen, J. E., 296
 Hermelin, T., 2136
 Hermsen, J. G., 899
 Hernandez, P., 3768
 Hernandez, T., 3770
 Hernandez, T. P., 951-2, 2727, 3770, 3772
 Herold, M. C., 1813
 Herrera, A., 854
 Herrero, J., 4873
 Herron, J. W., 7162
 Hertzsch, W., 4366, 4435
 Hervey-Murray, C. G., 2260
 Hesemann, C. U., 617
 Hesin, R. B., 1780
 Heslop-Harrison, J., 3586, 4439
 Heslot, H., 111, 620
 Hess, D. C., 2286, 4067
 Hester, A. J., 2657
 Heta, H., 6277
 Hetzer, T. (Mrs.), 6641
 Heu, *see* He
 Hewett, P. D., 4022
 Heybroek, H. M., 1429, 5077
 Heyland, K.-U., 3654, 5451
 Heyn, C. C., 6473
 Heyne, E. G., 267, 336, 450, 455, 5969
 Heywood, V. H., 1829
 Hiatt, V. S., 32
 Hicks, F. W., 2032
 Hidaka, T., 7083
 Hielscher, E., 1198
 Higashi, S., 2139
 Higgins, J. J., 6770
 Highkin, H. R., 2422
 Higueta M., F., 1351
 Hiivola, S.-L., 1196, 6384
 Hildering, G. J., 110, 5206
 Hildreth, W. R., 808
 Hill, A. V., 5560
 Hill, H. D., 2575
 Hill, J., 1794, 6681
 Hill, R. G. (Jun.), 3123
 Hill, R. R. (Jun.), 2615
 Hill, W. G., 3555
 Hille, M., 4590
 Hilli, A., 277
 Hillis, W. E., 3223, 5084-6, 6984
 Hilty, J. W., 2393
 Hinson, K., 3405
 Hinz, B., 1612
 Hinz, G. O., 2158
 Hirao, C., 6266, 6283
 Hiraoka, T., 3291, 5142
 Hiroma, K., 5296

Hirono, Y., 1774
 Hiura, U., 5960, 6242, 6277
 Hlopceva, I., *see* Hlopceva, I. M.
 Hlopceva, I. M., 3021, 3031
 Ho, K.-M., 727
 Hoare, E. M., 5563
 Hodgson, H. J., 775
 Hod'kov, L. E., 2414
 Hoen, K., 5555, 5570, 5572
 Hoes, J. A., 1217
 Hoff, R. J., 769, 1411, 5096
 Hoffbeck, L. J., 2869, 2877
 Hoffmann, G. M., 3851
 Hoffmann, J. A., 6062
 Hogenboom, N. G., 5228
 Hogen Esch, J. A., 922, 7239
 Hohlačeva, N. A., 3243
 Hohljakov, M. K., 5658
 Hohljakova, V. S., 6819
 Holbeche, J. A., 3119
 Holden, J. H. W., 4061
 Holgate, P., 5408
 Holienka, J., 6053
 Holland, N. S., 3314
 Holland, R. F., 2168
 Holliday, R., 5372
 Hollomon, D. W., 6521
 Hollowell, E. A., 2641
 Holly, I., 3259
 Holm, E., 4214
 Holm, G., 668
 Holmes, F. O., 2108
 Holmsgaard, E., 5074
 Holt, E. C., 806, 6408
 Holton, C. S., 2288
 Homizurasvili, N. M., 2964
 Hončariv, R., 130
 Honda, T., 2665
 Honma, S., 3354, 5190
 Hood, H., 2437
 Hooker, A. L., 589
 Hoover, C. D., 3779
 Hord, H. H. V., 3136
 Hori, T., 3897
 Horie, M., 6350, 6359-60
 Horn, D. J., 4462
 Horn, E., 3054
 Horn, W., 3652, 5449
 Hornby, C. A., 3037
 Hornby, D., 4192
 Horne, F. R., 5598
 Horošajlov, N. G., 2639
 Horsfall, J. G., 2106
 Horváth, E., 5202
 Horváth, I., R., 6414
 Hošek, K., 5499
 Hoser, J., 3333
 Hoskinson, P. E., 487
 Hosoda, T., 6481, 6735
 Hosoyama, T., 6350, 6359-60
 Hotileva, *see* Hotyleva
 Hotta, Y., 1781
 Hotyleva, L. V., 2337, 5514-5
 Hougas, R. W., 6509
 Hough, L. F., 2973
 House, L. R., 1833, 4263
 Houson, E. D., 1807
 Houston, B. R., 6078
 Hovanskaja, K. N., 5796-7
 Hoveland, C. S., 4365
 Hovhannisyán, R. A., 3415
 Hovhannisyán, S. K., 2177, 6037
 Hovin, A. W., 766, 2575, 4367
 How, J., 5151
 Howard, H. W., 905, 4600, 6493

Howland, A. K., 5274, 5533
 Howland, P., 5532
 Howrey, L., 5349
 Hoyman, W. G., 894
 Hrazdira, I., 3603
 Hristo, A., 1258
 Hristov, S., 4827
 Hrolinskij, L. G., 5683
 Hron, R., 6493
 Hruška, L., 4553, 4608, 6490
 Hsi, D. C. H., 948, 1563
 Hsieh, C.-F., 699
 Hsieh, T.-H., 1055
 Hsing, I.-H., 2781
 Hssan, A., 1126
 Hsu, H., 1728
 Hsu, Y.-S., 4759
 Hu, C. H., 21, 727, 2495, 6349
 Hu, C.-L., 2781
 Hu, K.-J., 1549
 Hu, K.-Z., *see* Hu, K.-J.
 Hu, S.-Y., 727
 Huang, C. S., 4297
 Huang, J. S., 737
 Huang, W.-L., 4330
 Hubbeling, N., 5314, 7120
 Huber, W., 4544, 4710, 6625
 Hughes, C., 2749, 6577
 Hughes, H. M., 1342
 Hughes, J. C., 6516
 Hughes, L. C., 961, 2730, 2773
 Hughes, R., 1866, 1876
 Huisingh, D., 4472
 Hulea, A., 2716
 Hulja, A., 5685, 5863
 Hull, J. W., 4981
 Hulluka, M., 2292
 Hulpoi, N., 1658
 Humphrey, A. B., 113, 4745
 Hunnius, W., 4596, 6532
 Hunt, I. V., 6377, 6386, 6444
 Hunter, D., 2681
 Huokuna, E., 846
 Hüppel, A., 1413
 Hursh, J. S., 4069
 Hurst, R. L., 1994
 Hurt, B. C. (Jun.), 3781
 Husain, A., 3022
 Husfeld, B., 3147
 Hussain, C. A., 5021
 Hussein, F., 4893
 Hutchinson, J., 7235
 Hutchinson, D. J., 3135
 Hutton, E. M., 4541
 Huyskes, J. A., 1543
 Hvostova, V. V., 137, 349, 353, 355, 629, 1685, 2039, 2071, 3523, 5988
 Hwang, S., 1987
 Hwang, Y. L., 22, 5332
 Hycka, M., 865
 Hyen, S.-K., 3227-8
 Hyun, *see* Hyen

IANCU, C., 512
 Ibraghimov, *see* Ibragimov
 Ibragimov, Š. I., 2063-4, 4616, 6560
 Ibrahim, F. M., 758, 2787
 Ichikawa, S., 3501
 Ignatoski, J. A., 1359
 Igue, T., 1120, 1513
 Iizuka, M., 3289
 Ikeda, N., 5322-4
 Ikegami, H., 4343
 Ilag, L. L., 257
 Ilčev, D., 2476

Il'ičeva, A., 4584
 Il'ičeva, S. N., 5858
 Illicevici, S., 2335
 Iliescu, L. V., 3188
 Iliev, A., 791
 Iliev, I., 1265
 Ilieva-Staneva, B., 4066
 Iliev, *see* Iliev
 Il'ina, I. M., 5691
 Il'ina, L. B., 4121
 Il'inskaja, K., 1214
 Illies, Z. M., 3236-7
 Illy, G., 1412
 Imaizumi, Y., 1800
 Imam, M. K., 7022
 Imamaliev, G. N., 2077
 Imamkuliev, S. D., 6860
 Imamura, A., 3449
 Imazu, T., 1533
 Iminov, M. I., 5734
 Imrie, B. C., 407, 4442
 Inamori, Y., 4063
 Inamura, H., 6014
 Indrea, D., 5178
 Induni, C. J., 2683, 2694, 2713
 Indyk, H. W., 4406
 Ing, E. G., 1342
 Ingerstedt, S., 3205, 3207
 Inge-Večtomov, S. G., 8, 77, 1714, 3437, 3442, 3518
 Inge-Vetschtomov, *see* Inge-Večtomov
 Ingold, M., 2239, 3972
 Inkilä, O., 4077
 Innes, N. L., 962-3, 2731, 2748
 Inomata, N., 7039
 Intrieri, C., 1248
 Inyang, A. O., 7094
 Ioan, E., 6645
 Ioanidi, I. P., 3953
 Ionescu, D., 3377
 Ionescu, M. V., 4934
 Ionescu-Șișești, V., 1117, 4000
 Ionescu, V., 3122
 Ioniță, M., 6180
 Iordanskij, A. B., 1783
 Iordansky, *see* Iordanskij
 Ipat'ev, A. N., 3340
 Irmadze, R., 6848
 Irizarry, H., 1516, 7034
 Irnazarov, I., 530
 Isaac, I., 3853
 Isakov, Ja. I., 4265
 Isakov, Ya. I., *see* Isakov, Ja. I.
 Ishida, T., 7093
 Ishii, M., 6369
 Ișikan, M., 2298
 Islam, A., 1008
 Islam, A. S., 1043, 1938-40
 Islam, M. N., 1927
 Ismail, A. A., 983
 Ismailov, H. A., 5881
 Israel, P., 2114
 Issa, E., 4014, 4039, 5276
 Issar, S. C., 1858
 Ito, M., 1781, 3602
 Ito, P. J., 4197
 Ito, R., 2034, 4305, 5929, 6327, 6334, 6336-7, 6351
 Ito, T., 5337
 Itoafä, E., 1040, 2798
 Itria, C. D., 2631
 Ivahnenko, A. N., 4187
 Ivakhnenko, *see* Ivahnenko
 Ivanjuk, G. T., 987
 Ivanov, A. P., 3940

Ivanov, N., 5381
 Ivanov, S., 671, 674, 3398
 Ivanov, V. I., 1761
 Ivanova, A., 4342, 6047
 Ivanova, E. B., 5745
 Ivanova, H., 6980
 Ivanova, K. V., 5156
 Ivanova, N. E., 6021
 Ivanova, T. M., 5719
 Ivaščenko, M., 4528
 Ivaščenko, T. A., 3241
 Ivaščenko, T. S., 6627
 Ivkina, N. S., 1704
 Iwabuchi, M., 3611-3
 Iwata, Y., 5927
 Iyengar, R. L. N., 2779
 Iyer, C. P. A., 1369, 3161, 3176
 Izquierdo Tamayo, A., 4753
 Izuno, T., 3097

JABBUR, G., 3453
 Jablov, A. S., 4957
 Jacenko-Hmelevskij, A. A., 1379
 Jackiewicz, A., 3039
 Jackson, B. R., 3921, 5972
 Jackson, E. A., 6323
 Jackson, G. C., 6877
 Jackson, W. T., 3596
 Jacob, F., 3535
 Jacob, V. J., 2897
 Jacobsen, P., 619, 4225
 Jacquot, M., 704, 2301
 Jacunskajta, V. N., 1613
 Jagannath, D. R., 4444
 Jaggi, H. L., 1834
 Jäggi, W., 7208-9
 Jagirdar, S. A. P., 1926
 Jagudina, S. I., 6889
 Jahn, G., 7240
 Jain, H. K., 107, 1572, 1851
 Jain, K. B. L., 433, 637, 646, 651
 Jain, M., 32
 Jain, M. L., 2408
 Jain, S. K., 1795, 1798, 2407, 2555, 5399
 Jakimenko, I. A., 6915
 Jakimenko, N. S., 1079
 Jakimov, L. M., 7024
 Jakimova, Ja., 867
 Jakob, H., 1722, 3447
 Jakobašvili, V. K., 6856
 Jakovenko, N. G., 388
 Jakovlev, N. N., 4003
 Jakovlev, S. P., 5763
 Jakovleva, I. A., 91
 Jakovleva, N., 5227
 Jakovleva, N. N., 5701
 Jakovleva, V. A., 5790
 Jakovleva, V. I., 5702
 Jakovuk, A. S., 1156
 Jakowlewa, *see* Jakovleva
 Jakubciner, M. M., 3835, 3999, 5848
 Jakušev, V. I., 1249
 Jalilov, *see* Žalilov
 James, A. P., 23, 3435-6, 7214
 James, E., 3765
 James, J. W., 82
 James, N. I., 2854
 Jamieson, B. G. M., 5356
 Jamil, M. B., 3798
 Jamin, D., 4239
 Jana, M. K., 1821, 5404
 Jana, S., 7153
 Janaki Ammal, E. K., 4832, 7035
 Janakieva, E., 4751

Janal, R. K., 2541
 Jančev, P., 1450
 Jancey, R. C., 3617
 Janchev, *see* Jančev
 Janick, J., 1509, 3289, 6897, 6904
 Janikulov, *see* Džanikulov
 Jankowski, F., 6661
 Jankulov, J., 4819
 Jan Mohammad, 1919-20
 Jánossy, A., 3644, 3956, 4511, 5439, 6446
 Janovski, I., 5597
 Jansson, G., 2129
 Jarcevam, Z., 1496
 Jarčuk, T. A., 2383
 Jaremenko, Z. I., 5858
 Jarošenko, T. V., 435, 5608, 5610, 5613, 5617
 Jarvis, J. L., 881
 Jarvis, J. M., 5389
 Jašina, I., *see* Jašina, I. M.
 Jašina, I. M., 900, 2073
 Jassem, M., 1088
 Jastrebov, F. S., 4284
 Jaswal, S. V., 6873
 Jauch, C., 6642
 Jauhar, P. P., 6285, 6407
 Jaureche, C., 818
 Javorek, E., 6192
 Jawanda, J. S., 6927
 Jayakar, S. D., 5409
 Jayaraj, S., 2922-4, 6743
 Jech, Z., 3814
 Jedliński, H., 656
 Jefremenko, *see* Efremenko
 Jekov, *see* Žekov
 Jelenić, D., 415
 Jelenković, G., 6914
 Jelenkovic, G. L., 5012
 Jelinić, D., 6193
 Jellum, M. D., 577-8, 4181
 Jemmett, J. L., 6280
 Jen, H. F., 686
 Jenken, V. B., 3468
 Jenkins, J. A., 2212
 Jenkins, J. E., 6280
 Jenkins, J. N., 1029-30
 Jenkins, S. F. (Jun.), 1314
 Jennings, D. L., 1335, 6888
 Jennings, P. R., 2503, 2505, 4298, 6342, 6367
 Jensen, J., 5127, 5302
 Jensen, N. F., 468, 607, 624, 2171, 2276, 6089
 Jensen, V. J., 5176
 Jepina, O. I., 5194
 Jeremjejev, M. I., 419
 Jermoljev, E., 6533
 Jewell, F. F., 1409
 Jiang, *see* Chiang
 Jiang, X.-R., *see* Chiang, H.-J.
 Jiménez Sáenz, E., 2023, 4779
 Jironkin, *see* Žironkin
 Jnanendra, K., 12
 Jobling, J., 5039
 Jodal, I., 6976
 Jodhpur, P., 2448
 Johannessen, C. L., 1316
 Johansen, R. H., 891, 914
 Johansson, N., 1694
 John, B., 5422
 John, C. M., 3089
 Johnson, A. G., 5155, 6990
 Johnson, B. J., 4273
 Johnson, B. L., 383, 3625, 5465

Johnson, E., 6883
 Johnson, E. M., 596
 Johnson, F., 6908
 Johnson, G. R., 6104
 Johnson, H. W., 3405
 Johnson, J. A., 2232
 Johnson, M. W., 575, 580, 2323, 6138
 Johnson, R., 2219, 3931
 Johnson, R. E., 2459
 Johnson, V. A., 326, 338, 410, 421, 2174, 2237, 3916
 Johnsson, H., 1405, 3202
 Johnston, C. O., 2266
 Johnston, G. S., 4141
 Johnston, T. H., 2525, 6357
 Johnston, W. H., 623
 Jokela, J. J., 1410, 5101
 Joković, D., 6914
 Joly, S., 3432
 Jones, A., 6535-6
 Jones, A. J., 6542
 Jones, C. M., 7069
 Jones, D. A., 2662
 Jones, D. G., 4357
 Jones, G. B., 957, 2735, 2743
 Jones, G. H., 6383
 Jones, H. D., 4481
 Jones, J. E., 1006
 Jones, J. K., 1345
 Jones, J. P., 266
 Jones, N., 781
 Jones, U. S., 2642
 Jong, B. de, 4205
 Jönsson, H.-A., 387
 Jönsson, R., 6737
 Joppa, L. R., 398
 Jordan, W. S., 573, 6198
 Jordano, D., 148
 Jordanov, Č., 1384
 Jordanov, M., 5220
 Jordović, M., 3027
 Jorgenson, E. C., 2864
 Josefsson, E., 3634
 Joseph, C. A., 6331
 Josephson, L. M., 2393, 4194, 6215
 Joshi, A. B., 1838, 5943, 6285, 6748
 Joshi, B. C., 1189, 1696
 Joshi, L. M., 2147
 Joshi, P. C., 4633, 6555
 Joshi, S., 5139, 7201
 Joshua, D. C., 1856
 Josse, J., 58
 Joubert, A. J., 4953
 Joubert, T. G. la G., 3265, 3283, 3339, 3379, 7032
 Jovanović, B., 6187
 Jovanović, M., 6914, 6978
 Jovanović, Ž., 6189
 Jovčev, N., 6311
 Jovmir, G., 1117, 4000
 Jowett, D., 666, 669, 693
 Jowtschev, *see* Jovčev
 Joyner, J. F., 1051
 Juantorena, J. M., 4694, 4700
 Judin, A. E., 3744, 5523
 Juhar, P. P., 3419
 Jukova, G. S., 5426
 Juľčevskaja, M. D., 4661
 Julén, G., 4358, 4416, 5482
 Juliano, B. O., 4293
 Julien, J. B., 2998
 Jun, J., 4559
 Juncu, A.-M., 2250, 2371, 4188
 Juncu, V., 1377
 Jung, B. J., *see* Chyeng, P.-C.

Jung, G. A., 4440
 Jung, H. R., 4219
 Junges, W., 2699, 4592
 Juo, P.-S., 6531
 Jura, P., 3264, 4239
 Jurceva, N. C., 3131
 Jurgjalajite, N. V., 1613
 Jurijčuk, I. I., 7148
 Jurina, O. V., 3244, 5162
 Jurko, V. S., 4733

 KABALKINA, N. A., 5679
 Kabarity, A., 5418, 6024-5
 Kabulov, S. K., 5065
 Kačalova, Z. P., 5879
 Kačan, K. F., 1153
 Kadambavanasundaram, M., 2776
 Kadir, Z. B. A., 1008, 1552
 Kafanov, G. A., 4657
 Kagawa, A., 5147, 5153
 Kageyama, M., 5161
 Kagohashi, S., 2139
 Kahlon, A. S., 1899
 Kahn, D. A., 1354
 Kailash, C., 2251
 Kain, I., 5957
 Kais, A. G., 1423
 Kajdaš, A. S., 5880
 Kakar, R. S., 3770, 4613
 Kaladžiev, I., 1893
 Kalaidjieva, *see* Kalajdzieva
 Kalajdzieva, S., 5243, 5282
 Kalásek, J., 1273
 Kalašnik, N. S., 4271
 Kalfov, S., 884
 Kalia, H. R., 6749, 7084
 Kaliničenko, I. M., 87
 Kaliničenko, R. I., 3009
 Kalinin, F. D., 530
 Kalinin, P. D., 2211
 Kalinina, I. P., 4888
 Kalinina, N. P., 2058
 Kalinitchenko, *see* Kaliničenko
 Kalinov, A., 6163
 Kaljaskina, T. V., 1353
 Kalnynja, V. K., 594
 Kalsdyan-Avanesyan, S. Kh., 2189
 Kalton, R. R., 765
 Kamalanathan, S., 2777, 2783
 Kambal, A. E., 4268
 Kamel, A. H., 6064, 6076-7
 Kamel, S. A., 983
 Kameraz, A., *see* Kameraz, A. Ja.
 Kameraz, A. Ja., 2717, 5689
 Kaminskaj, L. N., 5514
 Kamm, A., 6248
 Kammacher, P., 1826, 2756, 4632
 Kamra, O. P., 92
 Kanapathipillai, P., 6708
 Kanazawa, K., 5148
 Kandaurov, V. I., 5650
 Kandaurova, E. F., 5765, 5783
 Kandelaki, G. V., 6022
 Kaneda, C., 4539-40
 Kaneko, K., 4422, 4426
 Kang, I.-M., 2545
 Kanja, Č., *see* Kanja, Cz.
 Kanja, Cz., 5687
 Kannenberg, L. W., 6397
 Kanno, C., 2916-9
 Kantor, J., 1403, 1490-91
 Kanwar, R. S., 2840, 6626
 Kao, F.-T., 2223
 Kao, H., 2781
 Kao, S., 699
 Kapás, S., 4459, 5500, 5504, 6416
 Kapatadze, G. M., 2339
 Kaplan, S., 5385
 Kapoor, B. M., 5310
 Kapoor, S., 2390
 Kappelman, A. J. (Jun.), 590-1
 Kapur, K. K., 4822
 Karadžova, L. V., 5839
 Karaivanov, A., 333
 Karasińska, J., 2906
 Kardaševa, A. S., 34
 Karhi, Z., 416
 Karibasappa, B. K., 2506
 Kärki, L., 5046
 Karp, M. L., 44
 Karpfel, Z., 3491, 3603
 Kartalov, P., 3317, 7026
 Kartalow, *see* Kartalov
 Kartoškina, N. F., 5658
 Kasanovitch, *see* Kazanovič
 Kasatkina, I. D., 5330
 Kasha, K. J., 2625, 6428
 Kasianenko, *see* Kas'janenko
 Kas'janenko, A. G., 1761, 2080
 Kas'janov, S. A., 1439
 Kasperovič, Z. S., 5695
 Kasumov, V. G., 5893
 Katar'jan, T. G., 3183
 Katarki, B. H., 4641, 4668
 Katayama, T., 4300-2
 Katayama, T. C., 3714-6
 Katin-Jarcev, L. V., 2722
 Katkova, R. O., 209
 Kato, I., 3396
 Katsumata, H., 3258, 5132, 5137
 Katsuo, K., 4760, 4763
 Katz, E. R., 3559
 Katznelson, J., 2633
 Kaukis, K., 4199
 Kaul, A. K., 2234, 3991
 Kaul, B. L., 7035
 Kaul, C. L., 636, 4237, 7200
 Kaul, R. N., 5083
 Kaw, R. N., 6249, 6269
 Kawaguchi, K., 4212
 Kawahara, E., 6453
 Kawakami, K., 2696, 4743
 Kawanabe, S., 2554
 Kawano, K., 4320
 Kawano, S., 2600
 Kawas, S. M., 2658
 Kaya, K., 6324
 Kazačenko, R. F., 5793
 Kazakova, V. S., 269
 Kazancev, I. A., 986
 Kazanceva, G., 5186
 Kazankov, A. F., 518, 524
 Kazanovič, Ja. N., 1610
 Kazarinov, G. E., 87
 Kazi, Q. M., 1922-4
 Kazimierska, E. M., 874, 3488
 Kazimierski, T., 874, 3488
 Keček, N. A., 5804
 Keda, T., 2139
 Keddis, S., 6076
 Keerberg, H., 853
 Keerberg, O., 853
 Keil, H. L., 3011
 Keim, W. F., 2663
 Keldyž, M., 5787
 Kelemen, I., 5504
 Keller, E. R., 921, 6500-1
 Keller, T., 5060
 Kellner, E., 2610, 2653, 3362
 Kelly, A. F., 4384
 Kelsey, J. M., 6392
 Kempner, E. S., 7216
 Kenaschuk, E. O., 1643
 Kendjelič, V., 102, 2099
 Kendrick, E. L., 6062
 Kenfield, W. G., 7234
 Kennedy, B. W., 3402-3, 3408
 Kennedy, K. R., 2105
 Kenny, T. J., 4538
 Kerečki, B., 6193
 Kerefov, K. N., 568
 Kerefova, M. K., 6184
 Keremdičiev, M., 5072
 Keremidarska, S., 4872
 Kerkadze, I. G., 6855
 Kernkamp, M. F., 309
 Kerr, A., 6711
 Kerr, E. A., 3328
 Kerr, T., 2778
 Kervégant, D., 3463
 Kester, D. E., 3049, 3078, 4107, 6847, 6869
 Ketner, P., 7007
 Keum, I.-H., 2127, 2810-11
 Keum, T.-S., 2516, 2533, 2537
 Keum, Y. K., 2545
 Keys, C. H., 2112
 Khadhinov, *see* Hadžinov
 Khadzinov, *see* Hadžinov
 Khalatyan, K. K., 4945
 Khalidy, R., 3624, 5464
 Khalifa, M. I., 648
 Khalifa Anwar Hussain, 1949
 Khalil, I. H. I., 592
 Khan, M. A., 1908
 Khangyldin, *see* Hangil'din
 Khanna, M. L., 2714
 Khanna, P. P., 6304
 Khazra, H., 3878
 Kherde, M. K., 6039
 Khesin, *see* Hesin
 Khorana, H. G., 5392
 Khoshoo, T. N., 3267
 Khush, G., *see* Khush, G. S.
 Khush, G. S., 24, 1578, 3502, 7109
 Khvostova, *see* Hvostova
 Khwaja Abdul Haq, 1948
 Kičanova, I. M., 5824
 Kičina, V. V., 4882
 Kiellander, C. L., 3206, 5107, 5109
 Kiers, H. J., 5291
 Kiesling, R. L., 649
 Kietreiber, M., 5488-9
 Kihara, H., 1831, 2527, 3541, 3705-6, 3897
 Kihlman, B. A., 158, 165, 3597, 3607
 Kikačejšvili, Z. N., 6786
 Kikindonov, T., 1119
 Kikuchi, H., 5104
 Kikuchi, T., 1732
 Kikutani, J., 3305
 Kikuti, *see* Kikuchi
 Kilpatrick, D. T., 1250
 Kim, *see* Keum
 Kimber, G., 2144, 2271, 5984
 Kimble, K. A., 6730
 Kimland, B., 5100
 Kimura, M., 3550, 3734-6
 King, H. E., 954, 4653
 King, J. L., 5402
 King, J. P., 1480
 King, J. R., 1173
 King, N. J., 6599
 Kiper, I. M., 2688
 Kirby, A. H. M., 6793

- Kirby, J. S., 4269
 Kireeva, L. M., 5215
 Kiričenko, F. G., 400, 4737
 Kirienko, T. N., 5030
 Kirillov, Ju. I., 4259, 6299
 Kirpal Singh, K., 6927
 Kirpičenko, P. S., 6520
 Kirpičnikov, B. A., 2967
 Kirsanova, E. V., 2073
 Kirsnite, B. A., 7204
 Kirtikar Rajpal Singh, 6606
 Kiselev, I., 2717
 Kiseleva, A. G., 985
 Kishan Singh, 6617
 Kishi, Y., 6354
 Kishikawa, H., 4084
 Kisimova, L., 3827, 5197
 Kisimova, L. A., *see* Kisimova, L.
 Kiskin, P. H., 3154, 5749
 Kisliuck, *see* Kisljuk
 Kisljuk, M. M., 2051, 2086
 Kiss, A., 347, 3309, 3941, 4089, 5169, 5989
 Kiss, E., 6641
 Kiss, F., 3259
 E. Kiss, I., 5508, 6345
 Kiss, I. L., 6416
 Kiss, L., 4459
 Kiss, T., 5507
 Kita, F., 871
 Kitahara, S., 4548
 Kivi, E., *see* Kivi, E. I.
 Kivi, E. I., 93, 633, 3895, 4055
 Kiyosawa, S., 4338-40
 Kjellin-Stråby, K., 7221
 Klabukov, G. G., 6783
 Klages, H. K., 368
 Klang, C. A., 4887
 Klebesadel, L. J., 775
 Kleese, R. A., 1660, 4235, 7167
 Kleinhofs, A., 4371
 Kleinkauf, H., 5533
 Klimaševskij, E. L., 6203
 Klimenko, P. D., 4150
 Klimova, A. P., 5827, 5905
 Kline, D. M., 757
 Ključko, P. F., 489, 505, 6006
 Klomovickij, G. N., 4673
 Kłosińska-Rycerska, B., 6514
 Kloz, J., 126, 1624, 3626, 5466, 7144
 Kłozová, E., 127, 1624, 3626, 5466, 7144
 Knaben, G., 153
 Knapp, J. L., 6216
 Knavel, D. E., 1544
 Kneebone, W. R., 772, 2569, 6378-9
 Kneuer, C. W. de, 815, 819
 Kniga, M. I., 4734
 Knight, R., 4415
 Knight, R. J. (Jun.), 3096
 Knight, R. L., 4853
 Knight, W. E., 4400
 Knobloch, W., 3993
 Knott, D. R., 443
 Knowles, P. F., 4812
 Knowles, R. P., 776, 2609
 Knox, R. B., 4439
 Kobayashi, T., 5148
 Kobel, R. J., 6552, 6559
 Kobelev, Ju., K., 6181
 Kobeleva, E. N., 5886
 Kobiašvili, N. I., 3174
 Koblenc, L. V., 3281
 Kobori, O., 2916
 Kobyljanskaja, K. A., 3996
 Kobyljanskij, V. D., 4244
 Kočarjan, E. G., 5165
 Kočerežkin, V. G., 192, 1028
 Kočetova, E. A., 2137
 Koch, A., 4847, 4851
 Koch, B., 4604, 6414
 Köchling, J., 635
 Kočkin, M. A., 3693
 Kočurova, A. J., 3128
 Koczoy, F., 2535
 Kodama, A., 6415
 Koelle, G., 1130, 6662
 Koenig, R., 688
 Kogan, I. G., 4586
 Kohanova, L. L., 2
 Kohel, R. J., 997, 2755
 Kohli, S. P., 362, 4029
 Kohn, K. W., 59-60
 Kojima, S., 4422, 4426
 Koјnov, G., 1003
 Koјnow, *see* Koјnov
 Kokeny, B., 6459
 Kolesnik, Z. I., 5791
 Kolesnikov, M. A., 1277
 Kolesnikov, S. M., 4132
 Kolesnikova, A. F., 5433
 Kolev, D., 6163
 Kolev, D. H., 345
 Kolew, D., *see* Kolev, D. H.
 Kolhe, A. K., 5238
 Kollányi, L., 4980
 Kolmark, H. G., 133-5
 Kolontaeв, V. M., 4886
 Kolp, B. J., 1987, 2157, 2272
 Komes, I., 5685
 Komitov, R., 4933, 6868
 Komjáti, I., 5509
 Komkova, M., 910
 Kommedahl, T., 1693
 Kompaneec, M. K., 3803
 Kondareв, M., 3184
 Kondareв, *see* Kondareв
 Kondo, T., 3020
 Koneveckij, M. F., 3177
 Kondratenko, F. T., 6113
 Kondratjuk, O. K., 5844
 Kong, *see* Kung
 Konishi, T., 6240, 6266
 Konjaeva, N. M., 5697
 Kon'kov, A. G., 4178
 Kóno, A., 4076
 Kononenko, A. I., 3245
 Konopljá, S. P., 998
 Konovalov, N. A., 6969
 Konovalova, N. E., 5856, 5858
 Konstantinov, P., 3105
 Konstantinova, Z. P., 4491, 6426
 Konzak, C. F., 630, 2187
 Konvička, O., 5499
 Koo, *see* Ku
 Kooistra, E., 1601, 5239, 7087
 Koopmans, A., 3547
 Kopan', V. P., 5771
 Kopčev, G., 6732
 Kopestinskij, B. T., 3095
 Korablev, Ju., 1521
 Korkašvili, A. V., 3067
 Korman, G. W., 515, 6138
 Kornackaja, N. M., 5717
 Kornberg, A., 68
 Korneev, V. I., 504
 Kornejčik, Z. N., 1338
 Kornejčuk, N. S., 5888
 Korobkina, Z. V., 1281
 Korobko, A. V., 6755
 Korobko, P. Ja., 4011
 Korogodin, V. I., 1724
 Korohoda, J., 94-5, 1753
 Koroleva, N. Ju., 4094
 Korotin, P. M., 6051
 Korotkov, V. E., 4925
 Korotkova, A. P., 2185
 Korsakov, N. I., 340, 3387, 3838, 3840
 Kort, J., 5934, 6527
 Košelenko, V. M., 6805
 Košelova, E. N., 5827, 5905
 Kosmin, *see* Cosmin, O.
 Kosmodem'janskij, V. N., 5803
 Kosovac, Z., 6055
 Kössel, H., 5392
 Kostenko, A. I., 400
 Kostić, B., 299, 307
 Kostik, F. D., 5626
 Kostina, K. F., 1272
 Kostjanovskij, R. G., 145
 Kostrinski, I., 5318
 Kostrzewa, Z., 3116
 Kostyro, V. P., 5524
 Kostyšín, S. S., 529
 Kota, M., 6414
 Kotani, A., 5225
 Kotecov, P., 2994
 Kotenko, S. C., 3448
 Kotenko, L. V., 6631
 Kotezow, *see* Kotecov
 Kotov, L. A., 6803
 Kotov, M. I., 2940
 Kotov, Z. A., 5761
 Kotova, K. A., 4557
 Kott, M. F., 1891
 Kott, S. A., 4054
 Kováč, L., 130
 Kovačeva, I., 1637
 Kovacheva, *see* Kovačeva
 Kovács, A., 6200
 Kovács, E. I., 6677
 Kovács, S., 4064
 Koval', N., 5780
 Kovalchuk, *see* Koval'čuk
 Koval'čuk, R. I., 992, 2063-4, 6560
 Kovalenko, I. F., 4526, 4900
 Kovalenko, V. F., 6815
 Kovalenko, V. I., 2861, 4727
 Kovalev, I. V., 5871
 Kovalevskaja, N. I., 2236
 Kovalj, I. V., 610
 Koval'skij, I. D., 6223
 Kovaltchuk, *see* Koval'čuk
 Kovarskij, A. E., 3824, 4147
 Kovin'ko, V. P., 3694
 Kovlkanyan, V. H., 2177
 Köylijärvi, J., 389
 Koževnikova, N. N., 5714
 Kozhin, *see* Kožin
 Kozhushko, *see* Kožuško
 Kozin, R. B., 1609
 Kožin, S. A., 77, 3518
 Kozlov, P. I., 3196
 Kozlova, M. N., 7102
 Kozlovskaja, I. N., 5866
 Kozlovskij, A. I., 6479, 6622
 Kozłowska, M., 1515, 3270
 Kozłowski, T. T., 5060
 Kozubenko, V. E., 554, 6208
 Kozubenko, V. O., 2358
 Kožuharov, S., 6980
 Kozulja, I. E., 4259
 Kožuško, N. N., 2051
 Kraai, A., 5118
 Kraevoj, S. Ja., 3585

- Krajevoy, *see* Kraevoj
 Kraker, J. De, 5157
 Kral, F., 7015
 Kranz, A. R., 112, 6030
 Krarup H., A., 7062
 Krasičkov, V. P., 4630
 Krasjuk, G. P., 6568
 Krasnikov, B. V., 2069, 5222, 5717
 Krasnonogov, V., 2863
 Krasnoščekov, I. M., 5647
 Krause, G., 6818
 Kreminskij, V., 2930
 Krepeč, A., 94
 Kretinin, T., 2856, 2862
 Kretschmer, G., 6056
 Krevskaja, O. S., 5664
 Krezdorn, A. H., 6852
 Krishnaiah, V. V., 6549
 Krishnamurthy, R., 1842
 Krishnamurthy, T. N., 6603
 Krishna Prasad, 3308
 Krishnan, R., 5259, 5265
 Krishnan, R. H., 4312, 6325
 Krishnasamy Rao, T. B., 6546, 6558
 Krishna Sastry, K. S., 4260
 Kristensen, H. R., 2149, 3001, 4605, 4857
 Krivčenko, V. I., 5652, 5654
 Krivonogova, A. G., 4998
 Kröber, H., 6692
 Krödel, F., 5325
 Kroh, M., 5141
 Krol, M., 6114
 Królikowski, Z., 4185
 Kromhout, C. P., 5061
 Kronenberg, H. G., 1235, 4850
 Kronstad, W. E., 1988
 Kropis, E. P., 5778, 5782
 Krotova, T. I., 5717
 Krugilin, *see* Kružilin
 Krugljak, A., 7165
 Krugljakova, N. P., 3248
 Kruglova, A. P., 5788
 Krull, C. F., 3198, 6000, 6002
 Kruse, A., 6247
 Krut', V. M., 4267
 Kružilin, A. S., 1522, 4811
 Krylov, A. V., 6621
 Kšeminskaja, G. P., 1711
 Ku, K.-H., 3228
 Kubiak, R., 5419
 Kubicki, B., 3321-2, 3822, 7072
 Kucer, A. A., 1392
 Kučumov, A., 4597
 Kudajbergenova, A. S., 6058
 Kudina, Ž. D., 4193
 Kuhn, C. W., 1634
 Kukin, V. F., 5737
 Kulik, M. I., 109, 2070
 Kulik, T. A., 5667
 Kulikov, V. A., 5768
 Kulkarni, L. G., 4796, 6738
 Kulkarni, N. B., 2269, 6750
 Kulkarni, V. A., 2489
 Kul'pinova, M. P., 5855
 Kul'tiasov, N. V., 2809
 Kumagai, K., 5452
 Kumagai, T., 4056
 Kumar, J. C., 5136
 Kumar, L. S. S., 1839, 1854
 Kumar, S., 3610, 4230
 Kumari, S., 800
 Kunakbaev, S., 2043
 Kunakbayev, *see* Kunakbaev
 Kundekov, S., 1383
 Kundu, K. K., 736
 Kung, C.-T., 663
 Kung, W.-S., 3914
 Kunze, L., 3003
 Kuo, T.-T., 6365
 Kurata, H., 2916-9
 Kurbangel'dyev, S., 2774-5
 Kurihara, K., 4735
 Kuriyama, T., 5142
 Kurjatnikova, R. A., 3246
 Kurnik, E., 3631
 Kuroki, Y., 6987
 Kurtev, P., 3151, 3198
 Kurtew, *see* Kurtev
 Kurtgel'dyev, K. N., 6551
 Kusanagi, A., 4231
 Kushibuchi, K., 2034, 4305, 6327, 6351
 Kushwaha, J. S., 4639
 Kuspira, J., 6029
 Kutschumov, *see* Kučumov
 Kuukankorpi, P., 3906
 Kuusi, T., 4986-7
 Kuykendall, R., 513, 3783
 Kuźdowicz, A., 1089
 Kuziev, S., 5715
 Kuzin, A. M., 239
 Kuzmanov, B., 6980
 Kuz'mičeva, R. A., 3971
 Kuzmin, *see* Kuz'min
 Kuz'min, I. I., 194, 209
 Kuz'min, V. P., 365, 3847
 Kuznecov, V. F., 6816
 Kuznecov, V. G., 3278
 Kuznecova, A., 5787, 5870
 Kuznecova, M. R., 5660
 Kuznecova, N. F., 1005
 Kuznecova, O. A., 2685
 Kuznecova, S., 3407
 Kuznecova, V. G., 1808
 Kuznetsov, *see* Kuznecov
 Kuznetsova, *see* Kuznecova
 Kvasnikov, B., 3256
 Kvasova, E. V., 2081
 Kwiatkowska-Leska, L., 3324
 Kwiatkowski, Z., 3487
 LAAKSONHEIMO, J., 459
 Laborde, J. A., 3316
 Lacadena, J.-R., 264, 3973-4, 4085
 Lachman, W. H., 1597
 Lackamp, J. W., 3622, 4410, 5462
 Lacroute, F., 7223
 Łączyńska-Hulewicz, T., 841-2, 4508
 Ladizinsky, G., 6097
 Laer, U. von, 1720, 3445, 5333
 Lafever, H. N., 366, 1029
 Lager, A., 4358, 4416
 Lagerström, G., 278
 Lagièrè, R., 1747
 Lahmeneva, K. A., 5790
 Lajkova, L. I., 5430
 Lakshminarayana, T., 1220
 Lal, S. B., 1325
 Lalatta, L., 3153
 La Malfa, G., 2612
 Lamb, C. A., 366
 Lamb, K. P., 7042
 Lamb, M. W., 281
 Lamb, R. C., 4914
 Lambert, J. W., 3402-3
 Lambert, M. A., 3986
 Lambert, R. J., 2324
 Lamberti, F., 1391
 Lambeth, V. N., 3335
 Lammerink, J., 6482
 Lamprecht, H., 5073, 5257, 7237
 Lamprecht, M. P., 6700
 Lana, E. P., 914
 Lancashire, J. A., 2577
 Landar, E. G., 5878
 Landi, R., 2592, 6306
 Landridge, J., 5545
 Landry, J., 6154
 Laneckij, V. P., 4662, 5637, 5833
 Láng, F., 6179
 Lange - de la Camp, M., 322
 Langridge, J. B., 5562
 Lanka, E., 3569
 Lantican, R. M., 585
 Lantin, B., 4982
 Lanza, F., 497
 Lapádaru, V., 3193
 Lapastora, E. P., 1062
 Lapčenko, G. D., 5992
 Lapčuk, V. G., 6257
 Lapins, K. O., 3037
 Łapinski, M., 3484
 Lapkins, K., 3034, 4904
 Lapwood, D. H., 4585
 Larrea, P., 412
 Larson, R. E., 5479
 Larson, R. I., 429
 Lasarov, *see* Lazarov
 Laskowski, W., 5341-2
 Lasnikova, *see* Laznikova
 Last, J. A., 5383
 Laszlo, I., 3178
 László, T., 527-8
 Latčenko, V. N., 4251
 Latch, G. C. M., 2577
 Latif, A., 4295
 Lattèr, B. D. H., 83, 5549, 5565
 Lau, D., 2126
 Laubscher, F. X., 431, 6068
 Lauden, L. L., 4704
 Laudi, C., 3336, 5110
 Lauer, F. I., 4580, 6489, 6525
 Laura, M. P., 1475, 5094
 Lauriola, L., 1801
 Lavallée, E., 3325
 Lavidjan, G. G., 4679
 Laviola, C., 6729
 Law, A. G., 2606
 Law, C. N., 1760, 2253
 Lawes, D. A., 7135
 Lawrence, C. W., 3564-5
 Lawrence, F. J., 6887
 Lawrence, M. J., 6723
 Lawrence, T., 6410
 Lazányi, A., 113
 Lazár, M., 4896
 Lăzărescu, V., 6925
 Lázaro, C., 4195, 6147
 Lazarov, M., 1218, 6754
 Lazarova, R., 3350
 Lazenby, A., 4352
 Laznikova, T. N., 7210
 Leach, J. G., 1629
 Leach, S. S., 890
 Lear, B., 2934
 Lebeau, J. B., 756
 Lebedev, A. A., 898
 Lebedev, V. A., 5774
 Lebedeva, N. A., 898, 5693
 Lebedeva, V., 3253
 Lebsock, K. L., 2202-3, 2226
 Leclercq, P., 2931
 Le Conte, J., 2310, 2455, 2468
 Le Coq, C., 4816
 Leder, P., 56

- Ledesma, A., 822
 Ledley, R. S., 1824
 Lee, B. J. S., 960, 2734
 Lee, B.-S., *see* Ri, P.-S.
 Lee, G. A., 6374
 Lee, H.-Y., 5081
 Lee, J. A., 2753, 4629
 Lee, J. Y., *see* Ri, C.-Y.
 Lee, M. D., *see* Ri, M.-T.
 Lee, W.-J., 2297
 Lee, *see also* Ri
 Lee, Y. S., 743, 2989
 Legg, J. T., 1175
 Legg, P. D., 1127, 3285, 6724
 le Grand, F., 2842
 LeGrand, F. E., 2166
 Lehman, W. F., 4476
 Lehmann, H., 5962
 Leijerstam, B., 308
 Lein, A., 6043
 Leisinger, T., 7208-9
 Leitão, A. B., 2305, 2307
 Lejstrumas, K., 5520
 Lekeš, J., 4248, 5601, 6226
 Lekomceva, S. N., 5623
 Lelley, I., 4341
 Lelley, J., 5977
 Lemaeva, A. M., 6566
 Lemaire, Y., 1060
 Lemke, M., 138
 Lems, G., 1163, 1170
 Leng, E. R., 500
 Lengyel, P., 74
 Lenivceva, O., 4984
 Lenkov, L. D., 2379
 Leokene, L. V., 2652
 Leont'ev, A., 6637
 Leont'eva, Ju., 5707
 Leont'eva, N. T., 5864
 León Valencia, G., 233
 Leonori, A., 315
 Lapádatu, V., 3193
 Leppik, E. E., 5181
 Leroy, J. F., 4769
 Leseva, I., 5320
 Lesins, I., 828
 Lesins, K., 828
 Lespinasse, J. M., 2965
 Lesseva, *see* Leseva
 Lessman, K. J., 1195, 2471, 2591, 4786
 Lester, D. T., 5082, 5092, 5095, 6983
 Leuck, D. B., 1311
 Levickij, I. A., 2236
 Levings, C. S., 4165, 6152
 Levitin, M. M., 5724
 Lewis, C. F., 6552
 Lewis, D., 5429
 Lewis, E. B., 3528
 Lewis, E. J., 4368
 Lewis, C. F., 4624
 Lewis, J., 4382
 Lewis, K. R., 3545, 5422
 Lewis, S. I., 5546-7
 Lewontin, R. C., 1796
 Li, C., 686
 Li, H. W., 2495, 6365
 Li, J.-S., 710
 Li, K.-T., 686
 Li, L., 950, 4330
 Li, T.-K., 4334
 Liabeuf, J., 1168
 Liacu, A., 1252
 Liang, G. H. L., 267, 676, 695, 2464, 6312
 Liang, H.-C., 1710
 Liang, Y. T. S., 695
 Liatchenko, *see* Ljaščenko
 Libackij, E. P., 4782
 Lieberman, F. V., 4465
 Liénart, J.-M., 702
 Ligačev, N. I., 6952
 Lihackij, V. L., 4512
 Lihonos, F. D., 4878
 Likhonos, Th.D., *see* Lihonos, F. D.
 Lilienfeld, F. A., 4482
 Lilly, L. J., 3480
 Lim, J. K., 4166
 Limberg, P., 6050
 Lin, C. C., 469
 Lin, C.-F., 4762
 Lin, C.-S., 725
 Lin, H., 4962
 Linais, B., 3903
 Lindé, I., 3385
 Lindegren, C. C., 12, 22, 7217
 Lindegren, G., 5332
 Linden, R., 4848
 Linder, A., 2239
 Lindfors, S., 3275, 3277, 7033
 Lindhardt, K., 4599
 Lindner, L., 3630
 Lindsten, K., 3660, 5457
 Lines, R., 5038, 5041
 Ling, N. H., 4030
 Lingaraj, D. S., 1554
 Lingens, F., 5336
 Linhart, Y. B., 6998
 Link, L., 1641
 Link, L. A., 3788, 3794
 Linskens, H. F., 3600
 Lipkin, S., 1134
 Lippert, L. F., 3285, 6724
 Lipsic, D. V., 5703
 Lisicyn, P. I., 3803, 5588
 Lisicyn, V. N., 5177
 Little, R., 4037
 Litton, C. C., 1150-1, 2883, 3789-91, 3793
 Litun, P. P., 3809
 Liu, K. C., 2839
 Liu, L.-j., 2851
 Liu, Y.-K., 2885
 Liu, Y.-Y., 5015
 Liuni, C. S., 1381, 1390, 3163, 3173, 3189, 3192
 Livers, R. W., 336, 409
 Liyanage, D. V., 1319, 3088
 Liznev, V. N., 2076
 Ljaščenko, I. F., 1209, 2083
 Ljaščenko, I. I., 2929
 Lju, Ju.-ja., *see* Liu, Y.-Y.
 Ljubenov, A., 4173, 6186
 Ljubenov, Ja., 597
 Ljubimova, V. F., 114, 269
 Ljubuškin, V. T., 520
 Ljunger, A., 3203
 Llewelyn, J. C., 1884, 4210
 Lloréns, A. A., 1364
 Llosa B., C., 4208
 Lo, T. C., 737
 Lobanov, P. P., 193
 Lobanov, V. Ja., 5951
 Lobašev, M. E., 3512, 3525
 Löbl, D., 3351
 Lobodin, O. K., 1891
 Lobženko, L. I., 5430
 Lochmann, E.-R., 5341-2
 Locke, M., 63-7
 Lockwood, J. L., 5313
 Loeffel, F. A., 563, 596, 6140
 Loegering, W. Q., 439
 Loeschcke, V., 2702
 Loewel, E. L., 4923
 Lofgren, J. R., 409, 411, 5969
 Løfting, E. C. L., 3230
 Loganathan, N. S., 3081
 Loginova, L. G., 5338
 Loginyčeva, A. G., 6891
 Lombard, B., 6068
 Lombard, P. B., 6828
 Long, J. A., 751
 Lonnquist, J. H., 2356, 6135, 6149
 Löf, B., 2915, 4791, 6737
 Loomis, N. H., 3148
 Loose, R. de, 755
 Loper, G. M., 837
 Lopez O., R., 3998
 López-Sáez, J. F., 1810, 1825
 Loprieno, N., 1733, 3567
 Lorange, D. G., 2933
 Loreti, F., 4937
 Lorenzoni, C., 2366
 Löve, A., 3590
 Löve, D., 3590
 Loveless, A., 3457
 Lovett, L. A., 3983
 Lovi, N. K., 1175
 Low, A., 972, 2737, 5529
 Löwdin, P.-O., 139
 Lowe, A. D., 7042
 Lowe, C. C., 824, 4349, 4474, 4493
 Lower, R. L., 7105
 Lowrey, R. S., 770
 Lozano T., J. C., 3353
 Lozanov, P., 1548, 7073
 Lu, H.-Y., 2885
 Lu, S.-K., 4317
 Lu, T.-T., 710
 Lu, Y.-C., 1674, 7168-9
 Lubenec, P. A., 3841
 Lubimova, *see* Ljubimova
 Lucanus de Sacks, R., 1654
 Lučnik, *see* Lučnik
 Luciano, A., 4805
 Lucken, K., 412
 Lucken, K. A., 2221, 6036
 Luckov, P. G., 4124, 6143, 6148
 Lučnik, N. V., 96
 Ludilov, V., 1545
 Ludván, G., 1090
 Ludwig, R. A., 3459
 Luganskij, N. A., 6952
 Luig, N. H., 448, 6067
 Lukina, L. T., 5722
 Lukianova, *see* Luk'janova
 Luk'janenko, P. P., 388, 5481, 6020
 Luk'janova, E. N., 5784
 Luk'janova, M. V., 4245-6
 Lukša, A. Ja., 4186
 Lukyanenko, *see* Luk'janenko
 Luna Pais, A., 303, 317, 319
 Lund, H. R., 2279, 6161
 Lundin, P., 6441
 Lundqvist, A., 4088
 Lundqvist, U., 4221, 4233
 Lunina, N. N., 5837
 Lupescu, F., 1242, 4894, 4897, 4912
 Lupton, F. G. H., 384, 3662, 5459
 Lutkov, A. N., 1108, 4727
 Luzina, Z. A., 1695
 L'vova, I. N., 5594
 Lyall, L. H., 1692
 Lyaschenko, *see* Ljaščenko
 Lylov, G. I., 3214
 Lyons, A. J. (Jun.), 5329

- Lysikov, V. I., 4156
 Lysikov, V. N., 2053–4, 4154, 5634
 Lyubenov, *see* Lyubenov
 Lyubenov, Y., *see* Lyubenov, Ja.
- M., A., 3810
 Maan, S. S., 412, 2221, 6036
 Mabuchi, T., 3737–40, 3963, 6333
 McAleese, C. M., 2845, 6609
 McArdle, F. J., 598
 McArthur, J. M., 1992
 Macartney, J. C., 5267, 5274
 McClure, W. J., 678, 6319
 McCollum, G. D., 1507, 7025
 McCoy, G. A., 2606
 McCoy, M. S., 647
 McDaniel, J. C., 4981
 McDaniel, M. E., 463, 4254
 McDaniel, R. G., 525, 6124, 6169
 McDermott, R. E., 1406–38
 McDonald, D. J., 708
 MacDonald, M. D., 429
 McDowall, F. H., 4431
 Macer, R. C. F., 287, 291, 2148, 2264, 2438, 3935, 4082, 6069, 6079
 Mačev, S., 1893
 McEwan, J. M., 2229, 2267
 McFarland, A. G., 4964
 McFerran, J., 3343
 McGahen, J. H., 515, 2323, 6138
 McGavin, S., 1779
 MacGillivray, H. G., 7010
 MacGillivray, J. H., 2013
 McGinnis, R. C., 469
 McGrew, J. R., 3130
 McGuire, C. F., 4369
 Machida, H., 3073
 Machida, Y., 4907
 Machold, O., 5203–4
 McIntosh, D. L., 4904
 McIntosh, R. A., 2220, 4015, 4038
 Mačis, Ju., 7027
 McKay, H. C., 4425
 MacKay, J. H. E., 796
 McKay, J. W., 2953, 3077
 McKee, R. K., 4585
 McKeen, C. D., 5168
 Mackenzie, A. M., 4817
 MacKenzie, D. R., 6220
 McKenzie, R. I. H., 6107
 Mac Key, J., 3865–70, 3872, 3874, 3879–81
 Mackie, J., 3807
 Mackiewicz, H. O., 2643
 Mackiewicz, T., 845
 Mackinney, G., 3639
 McKinney, H. H., 4196
 Macko, V., 4036
 Mačkowiak, M., 2431, 3025
 McLennan, H. A., 2625, 6428
 MacLeod, R. C., 160
 MacLeod, R. D., 1812
 McMillan, C., 2560
 McMullan, J. L., 6088, 6236
 McNaught, A. D., 1805
 McNeal, F. H., 398, 2226, 2238, 3990
 McWhorter, F. P., 1631
 McWilliam, J. R., 230, 796–7, 5548, 5553, 5555–7, 5564, 5568–9, 5571
 Madan Mohan Lal, 5602
 Madden, D., 4952
 Madhava Rao, V. N., 3068
 Madhusudana Rao, G., 2510
 Madjirowa, *see* Madžirova
 Madjolelo, S. D. P., 2376
- Madžirova, L., 3347
 Magassy, L., 1091, 6478
 Magato, K., 6354
 Mägi, E., 1264
 Magidov, B. V., 4128
 Magnani, G., 3218–20
 Mago N., P., 6597
 Magomet, L., 1598
 Magoon, M. L., 2466, 4276, 6314
 Magri-Allegra, G., 2651
 Maguire, M. P., 25, 5423
 Mahadevan, A., 5007
 Mahadevappa, M., 4257, 6297, 6300, 6302
 Mahalin, M. A., 2183, 4086
 Mahammed Ibrahim Shaalan, 2247
 Mahanec', I. A., 4087
 Mahapatra, L. N., 6183
 Mahbub Ali, 1020
 Maher Mohamed Nawar, 6252
 Maheshwari, J. K., 6876
 Maheshwari, P., 184
 Mahlberg, P. G., 2870
 Mahnev, A. K., 6979
 Mahudeswaran, K., 4026
 Maia, N., 3594
 Maier, J., 4736
 Majerník, O., 6264
 Majisu, B. N., 5530
 Major, G. L., 6379
 Majoros, L., 5511
 Majstrenko, O. I., 2233
 Majsuradze, E. U., 1282
 Majsuradze, N. I., 4942
 Majumdar, P. K., 1844
 Majumdar, S. K., 4837
 Majumder, B., 6332
 Majumder, D., 2904
 Majumder, P. K., 6864
 Makarevič, V. G., 7210
 Makarevich, W. G., *see* Makarevič, V. G.
 Makarova, N. N., 4093
 Makarova, S. I., 3476
 Makašvili, G. A., 2987–8
 Mäkelä, T., 4550
 Makhanets, *see* Mahanec'
 Mäkinen, Y., 5435
 Maklakova, G. F., 5866, 5897
 Maksimčuk, G. P., 2194
 Maksimov, I. L., 3978
 Maksimova, A. D., 6505
 Maksimova, R. A., 1737, 7229
 Maksjutin, G. V., 519
 Maksudov, Z. Ju., 2763
 Maksyutin, *see* Maksjutin
 Malabuyoc, J. A., 6361
 Malamud, O., 2711
 Malamura, T. M., 5525
 Malcolmson, J. F., 935
 Maleckij, S. I., 603, 2375
 Málek, I., 1
 Malenov, F. E., 5665
 Maliani, C., 3913, 5513
 Maliga, P., 6829, 6835
 Malik, B. S., 5136
 Malik, C. P., 2581, 6395
 Malík, T., 6794, 6836
 Malinina, N. A., 988
 Malinovskij, B., 3922
 Malinovskij, B. N., 685, 1760
 Malinovskij, O. V., 1725–7
 Malinowski, *see* Malinovskij
 Mallah, G. S., 494
 Malling, H. V., 142
 Malm, N. R., 677
- Malmborn, S. O., 3544
 Malo, S. E., 4946
 Malov, N. A., 5710
 Maltabar, L. M., 3197
 Mamedov, A. M., 6936
 Mamedova, Š. Ja., 5643
 Mamontova, V. N., 3516
 Manamohanlal, S., 6325
 Manchanda, P. L., 6293
 Mańczak, M., 1505, 1512
 Mándy, Gy., 3956, 4064, 4713, 6262, 6587, 6725
 Mănescu, C., 1346
 Manev, T., 6761
 Mangath, K. S., 6291
 Manghers, L. E., 3890
 Manglitz, G. R., 881
 Maniyar, A. K., 1926
 Mankevič, O. I., 5517
 Mann, H. O., 2158
 Mann, J. D., 5411
 Mann, T. J., 2874
 Mannanov, N. M., 6565
 Manner, R., 840, 4376, 4883
 Manners, J. G., 4037
 Manninger, M., 314
 Manoliu, M., 2102, 2463, 4144, 6151
 Manolov, A., 2876
 Manovcharyan, M. A., 2884
 Mansat, P., 3643, 4263, 5438
 Mansour, A. A., 648
 Mansur Mohsin Gilani, 1937
 Mansurov, G. A., 6779
 Mansurova, L., 1510
 Mantejfel', V. M., 1713
 Manthirratna, M. A. P. P., 6874
 Mănuță, L., 3431
 Manučarjan, *see* Manovcharyan
 Manuilova, A. S., 1609
 Manukjan, G. A., 3303
 Manželij, I. I., 1106
 Manzer, F. E., 888
 Manzjuk, S. G., 4135
 Manzoor Ullah, 1911–4
 Marappan, P. V., 2777
 Marcelli, E., 1148, 1155
 Marcet, E. von, 1452
 Marchais, L., 2490
 Marchant, C. J., 4448
 Marchesi, G., 5199
 Maréchal, R., 3389
 Marenaud, C., 2965, 3029, 3053
 Margarjan, A. E., 2970, 2978
 Margna, U., 1532
 Margoliash, E., 3508
 Marič, M. M., 6157
 Marinescu, N., 7019
 Marinoff, I., 1092
 Marinov, M., 2320, 5294
 Marinova, R., 5294
 Mar'jahina, I. Ja., 272
 Markarian, *see* Markarjan
 Markarjan, D. S., 5427
 Markkula, T. M., 262
 Markova, K., 201
 Marks, G. E., 4570
 Markus, F., 4828
 Marocchi, G., 2957
 Marovtjan, S. A., 3200, 6945
 Marquardt, H., 1720
 Marquez-Sanchez, F., 562
 Marras, F., 3064
 Marro, M., 5171, 7078
 Marshall, F., 2239
 Marshall, H. G., 473, 2283

- Marshall, H. H., 3417, 5308
 Martens, J. W., 6107
 Martin, D., 1254
 Martin, F. W., 1122-3, 2726, 4611, 4742, 4744
 Martin, J. A., 6770
 Martin, K. L., 2729
 Martin, P. G., 1606
 Martin, T., 5023
 Martin, W. J., 951-2
 Martinek, V., 6722
 Martinez, A. P., 1323, 1330
 Martínez, E. A., 3904
 Martínez, M., 3215
 Martinez, S. F., 3928
 Martínez-Zaporta, F., 1748
 Martini, A., 7225
 Martini, G., 2190, 3666, 3945, 5471
 Martinov, S., 5272
 Martinson, V. A., 1175, 2895
 Martirosjan, *see* Martirosyan
 Martirosyan, R. B., 7152
 Martjanova, *see* Mart'janova
 Mart'janova, A. I., 1610
 Sz. Martos, V., 3323
 Marutjan, *see* Marovtjan
 Maruyama, A., 2502, 2517, 2542
 Maruyama, T., 3550, 3576
 Marvanová, L., 4505
 Mas, P., 1590
 Mascarenhas, H. A. A., 5316
 Masler, V., 6219
 Maslinkov, M., 866
 Maslinkow, *see* Maslinkov
 Massey, J. H., 6458, 6746
 Massie, I. E., 2883
 Masson, C.-G., 1206
 Maštakov, S. M., 1037
 Mastenbroek, C., 2715
 Masuda, K., 6710
 Masuda, S., 3231
 Masueljan, M. S., 2299
 Masueluan, *see* Masueljan
 Matallana Ventura, J., 3892
 Matatov, P. Ja., 2328
 Matatova, E. R., 2328
 Matejuk, S. A., 4157
 Matevska, N., 3158
 Matewska, *see* Matevska
 Mather, K., 5353, 5396
 Matherne, R. J., 2834, 6595
 Matheson, K. I., 787
 Mathison, M. J., 480
 Mathre, D. E., 2790-1, 4660
 Mathur, O. P., 2848, 6260
 Mathur, R. K., 4638
 Mathur, R. S., 3425
 Mathur, S. B., 2913
 Mathur, S. C., 742
 Mathur, V. S., 2404, 4213
 Matjušina, E. D., 1783
 Matlock, R. S., 4711
 Matoshko, *see* Matoško
 Matoško, I. V., 6632
 Matsubayashi, M., 2696
 Matsui, S., 4956
 Matsumoto, R., 3274
 Matsumoto, S., 2547, 5334
 Matsumura, S., 2164, 3737, 3739-41, 3963, 6027, 6333
 Matsuo, T., 3900
 Mattern, P. J., 410, 2235
 Matthaei, H., 3533
 Matthaei, J. H. H., 50
 Matthews, P., 1677
 Mattingly, E., 3581
 Matuo, T., 3225
 Matushina, H. D., *see* Matjušina, E. D.
 Matuškin, N. A., 5526
 Matzinger, D. F., 1131, 1138, 2874, 3589
 Matveev, N. D., 1031
 Maugenet, J., 5345
 Mauro, F., 3444
 Mavrodineanu, S., 5048
 Maximova, *see* Maksimova
 Maxon Smith, J. W., 5221
 Maxwell, F. C., 1029-30, 6216
 May, C., 5075
 Mayer, G., 3162
 Maynar, F. H., 2620
 Maynard, D. N., 1597
 Mayo, O., 1777
 Mayr, E., 282
 Maystrenko, *see* Majstrenko
 Maysuradze, *see* Majsuradze
 Maze, J., 808
 Maze, J. R., 6961
 Mazepin, M. G., 1116, 4712
 Mazlen, A. S., 7219
 Mazlumov, A. L., 1078, 1093
 Mecklenburg, H. C., 2706
 Medeiros, J. W. A. de, 4948
 Medina, D. M., 809, 1164-5
 Medina, J. C., 809
 Medinets, *see* Medynec'
 Medvedeva, G. A., 1713
 Medvedeva, G. B., 5995
 Medvedeva, O. A., 3100
 Medynec', V. D., 6042
 Meenakshi, G., 3424
 Meenakshi, K., 4272
 Meenakshi Mathur, 5135
 Megnet, R., 1734
 Mehandžiev, A., 323, 4249
 Mehra, R. B., 4649
 Mehrota, N., 3365, 6745
 Mehta, R. K., 873
 Mei, C., 2806
 Meinx, R., 5491
 Mejsel', M. N., 1713
 Mekasha, W., 421
 Mélard, V., 4564
 Melchior, G. H., 3216-7
 Melehina, A. A., 4985
 Melekov, I. S., 6957
 Melekhina, *see* Melehina
 Melikišvili, M. I., 6823
 Melikova, O. F., 6742
 Mellenthin, W. M., 1256
 Mello-Sampayo, T., 380, 2213, 3962, 4164
 Mel'nik, I. V., 6145
 Melton, B., *see* Melton, B. A.
 Melton, B. A., 1989, 4481
 Memmedov, E. G., 5985
 Memon, A. M., 1918-25
 Mendel, G., 9, 40, 3543, 5257, 5366
 Mendel, G. J., *see* Mendel, G.
 Mendel, J. G., *see* Mendel, G.
 Mendonça, A. A. de Ve, 4750, 5167
 Mendonça, N. T. de, 1513, 5232, 7121
 Mengesha, M. H., 2601
 Menickij, Ju. L., 3213
 Mėnikov, Ī. Ī., 5875
 Menlikiev, M. Ja., 5818
 Mensinkai, S. W., 4634
 Menzel, M., 2238, 6592
 Menzel, M. Y., 4686, 5201
 Menzinger, W., 258-9
 Mercado-Flores, I., 3078
 Meredith, B., 2634
 Meredith, W. R., 4480
 Mergen, F., 1393, 1486, 5082, 6983
 Merh, J. L., 6751
 Merino, F., 822
 Merriam, D., 888
 Merwine, N. C., 1070-1
 Mešerjakova, 5610
 Mesch, J., 3956, 3966
 Meselson, M., 3532
 Mešerjakova, I. V., 5789
 Messiaen, C.-M., 1590
 Mészáros, L., 6187
 Mészöly, Gy., 5234
 Metcalfe, D. R., 2436
 Metcalfe, W. H., 1298
 Metlickij, L. V., 5624, 6515
 Mettin, D., 2420
 Metzger, R. J., 1990-1, 6062
 Metwally, M. A. M., 567
 Meulen, A. van der, 4953
 Meuris, P., 7223
 Meurman, H., 461, 621
 Meyer, J. R., 4628
 Meyer, L. P., 6504
 Meyer, R. W., 3850
 Meyer, V. G., 4628
 Mhitarjan, S. S., 520
 Mia, M. M., 6588
 Miah, A. J., 2088
 Michaelides, R. C., 2120
 Michaelis, P., 1792, 3572
 Michel, L. J., 4074
 Michels-Nyomarkay, K., 1177
 Michie, J. M., 281
 Michielin, A., 821
 Michna, M., 2912
 Miclea, C., 2179, 2182
 Mičulka, B., 1358, 4992, 5002
 Mičurin, I. V., 1827
 Mielnik, A., 1373
 Miezitis, E. O., 1254
 Migend, D., 4920
 Migin, K. V., 3107
 Migliorati, L., 6115
 Migušova, E. F., 4045
 Mihacea, I., 6843
 Mihăescu, G., 1285, 1346, 3124, 6838
 Mihail, A., 1186
 Mihailescu, A., 3665, 5470
 Mihajlec', V. I., 6284
 Mihajlova, P. M., 1542, 3290
 Mihajlović, M., 6201
 Mihalache, M., 5174
 Mihalca, A., 1386, 3186, 5025
 Mihályfalvy, I., 6639
 Mihatsch, H., 1260
 Miheev, A. M., 4918
 Mihov, A., 1555, 3319
 Mijasowa, M., 2906
 Mika, A., 2983
 Mikala, F., 6053
 Mikalevskaia, O. B., 5672
 Mikołajczyk, J., 1754-5
 Milanese, G., 1785
 Milanov, B., 4872
 Milbrath, J. A., 6828
 Mildenerberger, G., 1260
 Mileško, A. F., 2969, 6822
 Milev, A., 489
 Milica, C. I., 2250, 2371, 4188
 Miličiu, I., 1242, 4895-7, 4912
 Milkman, R. D., 5377
 Mill, C. H. Jr., 5540

- Miller, A. C., 1561, 3773, 5281, 7155
 Miller, D., 2232
 Miller, F. R., 689
 Miller, G. D., 2232, 3983, 3986
 Miller, G. W., 7156
 Miller, H., 3887
 Miller, I. M., 5298
 Miller, J. C., 2015, 2675, 2727, 3678, 3770, 3773
 Miller, J. W., 1228
 Miller, P. A., 991, 4629
 Miller, P. W., 1362
 Miller, T. E., 632, 4211
 Millerd, A., *see* Miller, A. A.
 Millerd, A. A., 5547, 5564
 Millett, A. H., 6730
 Millikan, D. F., 1283, 1668, 6818, 6830
 Millington, J., 2646
 Millis, L. A., 6029
 Milne, D. L., 5935
 Milov, V. M., 3420
 Milovankić, M., 1268, 6806
 Milovanova, L. V., 5783
 Milstein, C., 5389
 Miltimore, J. E., 789–90, 1992
 Milton, J. M., 3853
 Min, B.-R., 2297
 Minamizawa, K., 1293
 Mincoha, J. L., 4222–3, 6298
 Mindlin, S. Z., 1701
 Minko, D. G., 1024
 Minkov, S., 1291
 Minoju, N., 5740
 Mirahmedov, S., 1025
 Mirakhmedov, *see* Mirahmedov
 Miranda C., S., 3370
 Miranda, H. da S., 6340
 Mira Sen, 1700
 Mircetich, S. M., 6883
 Mirchandani, R. L., 2231
 Miri, R. K., 879–80
 Mirošničenko, E. Ja., 3825
 Mirošničenko, I. I., 3837
 Mirpulatova, N. S., 1023, 5824
 Mirza Bashir Ali Baig, 1922–3
 Mirzelieva, H., 6890
 Mishra, G. M., 7125
 Mishra, M. D., 2913
 Mišić, P. D., 1261, 3671, 5476
 Mišović, M., 6201
 Misra, A. P., 661, 6305
 Misra, D. P., 4803
 Misra, R. N., 6344
 Mitchell, A. F., 5038, 5041
 Mitchell, W. A., 6875
 Mitchell, W. W., 777
 Mitidieri, A., 3048
 Mitjušova, N. M., 1725–7
 Mitkov, T., 2476, 5282, 7092
 Mitov, N., 5859, 5883
 Mitra, G. P., 2521
 Mitra, J., 3494
 Mitrović, A., 1657, 3397
 Mitsui, M., 6710
 Mitsukuri, Y., 4315
 Mittal, S. P., 3242
 Mittelstädt, H., 6842
 Mittempergher, L., 4951, 6827
 Miu, T.-S., 709, 715, 745
 Miura, Y., 2517
 Miyabara, M., 5297
 Miyagawa, S. T., 2934
 Miyagi, K., 5121
 Miyake, N., 3231
 Miyasaka, S., 5316
 Mkrčtćjan, G. G., 2999
 Mladenceva, M. S., 1274
 Mladentseva, *see* Mladenceva
 Moav, R., 6705
 Mobley, E. O., 7115
 Mócsy, J., 6003
 Modery, M. G., 6812
 Modilevsky, J. S., *see* Modylevs'kyj,
 Ja. S.
 Modilevsky, Y. S., *see* Modylevs'kyj,
 Ja. S.
 Modylevs'kyj, Ja. S., 1034, 6765
 Moens, P., 1769
 Moh, C. C., 1619, 7145
 Mohamed, A. H., 493–4, 1822, 3346
 Mohamed, H. A., 586
 Mohamed Ahmed El-Sahrigy, 1570
 Mohamed El Sayed Radwan Ahmed,
 859
 Mohamed Mandouh El-Rouby, 6202
 Mohamed Nagah Karamany El-Sayed,
 1565
 Mohamed Osman Khidir, 6758
 Mohammad Shuiab Chaudhry, 7918
 Mohan, D. P., 4263
 Mohr, H. C., 1544
 Moiseeva, M. E., 5807
 Moisesescu, L., 2179
 Moisoiu, G., 7177
 Mokrickaja, M. S., 5659
 Molberg, E. S., 2113
 Molčan, I. M., 280, 558, 4134, 6034
 Moldovan, M. Ja., 5805
 Molhova, E., 5216
 Molin, V. I., 2046
 Moll, R. H., 495, 2348, 2355
 Möller, K. H., 4593
 Molotkovskij, G. H., 529, 4138, 4179,
 5877
 Momčilović, V., 298
 Mônaco, L. C., 1161–2, 1164
 Monasterios de la Torre, T., 2721
 Monheim, A. T. A., 586
 Monin, A., 4849
 Monod, J., 3535
 Montanari, V., 2161
 Monteagudo, A., 3974
 Montgomerie, I. G., 6905
 Monti, L. M., 97, 351, 2188
 Montoya Maquin, J. M., 1442
 Montuelle, B., 2982
 Moomaw, J. C., 4290
 Moore, J. N., 3110, 3134
 Moore, K., 3915
 Moore, M. B., 478–9
 Mooy, C. J. De, 1659
 Mora, C. R., 2836, 2844
 Moraes, F. R. P. de, 4767–8
 Morandini, R., 1397
 Mordasov, M. A., 1610
 More, B. B., 6750
 Moreau, J. P., 6218
 Morelli, G., 4869
 Moreno, M., O., 370
 Morettini, A., 1263, 3050, 4928
 Morfaux, J.-N., 5345
 Morgan, A. R., 5392
 Morgan, D. T. (Jun.), 6176
 Morgun, V. V., 516
 Morice, J., 7061
 Morimura, K., 3725
 Morishima, H., 3717–9, 4297
 Morison, L. S., 4614
 Morita, K., 4689, 5070
 Moriya, A., 4702, 6481, 6735
 Moriya, I., 6244, 6266, 6283
 Moriya, T., 2139
 Morley, F. H. W., 2646
 Morlova, I., 4880
 Morozov, G. F., 6957
 Morozov, V., 4561
 Morozova, E., 4575
 Morozova, N. P., 5762
 Morpurgo, G., 106
 Morrill, J. L., 695
 Morris, L. L., 7146
 Morris, R., 410, 2235
 Morrison, D., 2399
 Morrison, E. G., 3784
 Morrison, J. W., 6944
 Morse, M. L., 5386
 Mortimer, R. K., 1719, 3428
 Moruju, G., 6820
 Morvan, G., 3019
 Mosele, L., 4615
 Moseman, J. G., 2107
 Moser, M., 7236
 Mosevickij, M. I., 5
 Mošneagă, A., 2365
 Mossberg, R., 1526
 Mossé, J., 6154
 Motorca, I., 3383, 7149
 Motoyoshi, F., 4053
 Mottier, P. P., 2981
 Mouat, H. M., 2017
 Moule, C., 2275
 Moulton, J. E., 1359
 Mounolou, J. C., 1722
 Moureaux, T., 6154
 Moustacchi, E., 5335
 Moustafa, E., 6388
 Moustafa, M. A., W. 1308
 Moutschen, J., 1817, 1821, 4232, 5404
 Moutschen-Dahmen, J., 3481
 Moutschen-Dahmen, M., 1817
 Možaeva, V. S., 355, 2044
 Možaeva, *see* Možaeva
 Mozhayeva, *see* Možaeva
 Možnyj, N. T., 1075
 Mozozova, Z. A., 5595
 Mpouma, L. C., 2122
 Mráz, F., 6722
 Mudra, A., 3875, 3877
 Muehlbauer, F. J., 2283
 Mueller, S., 1341
 Muhamedžanov, M. V., 1025
 Muhammad Abdul Aziz, 1906–9, 7130
 Muhammad Akram Khan, 1916
 Muhammad Anwar, 1907
 Muhammad Asghar, 6591
 Muhammad Ashraf Quraishi, 1932
 Muhammad Hussain, 6591
 Muhammad Salim Mirza, 1905
 Muhammed Amin Khan, 1942–5
 Muhanova, J., 3427
 Muhin, N. D., 5589
 Muhsinova, F. H., 1027
 Mukaide, H., 3732
 Mukhamedžanov, *see* Muhamedžanov
 Mukherjee, D., 1664
 Mukherjee, S., 736
 Mukherjee, S. K., 1844
 Mukherji, R. N., 5134
 Mukula, J., 459, 1502
 Mulkey, W. A., 7044
 Mullaev, T. I., 3276
 Müller, A. J., 147, 3582–3
 Muller, F. M., 1602
 Muller, H. J., 3542
 Müller, K., 2126

- Mullick, D. B., 638
 Mullick, R., 174
 Mullin, R., 4580, 6489
 Müllner, L., 3162
 Multamaki, K., 471, 475, 4383
 Munck, L., 5467
 Mundry, K. W., 64
 Munger, H. M., 5268
 Muñoz Flores, I., 3301
 Muñoz Orozco, A., 2387
 Munro, J. M., 976
 Munteanu, O., 2382
 Müntzing, A., 1830, 3642, 5437
 Muradov, A. G., 6937
 Murai, M., 3235
 Murakami, M., 4347–8, 4422, 4426, 5146, 6370
 Murakishi, H. H., 3354
 Muralidharan, V. K., 2489
 Muramatsu, M., 4450–1
 Murashige, T., 2879
 Murata, M., 1799
 Murawski, H., 2990
 Murdy, W. H., 532
 Murešan, T., 202, 600, 2335, 2341, 2373, 4143, 6136–7
 Murešan, *see* Murešan
 Murešan, P. L., 6210
 Murin, A., 159, 5415
 Murphy, E. F., 2972, 7080
 Murphy, H. C., 477, 2288, 4075
 Murphy, H. J., 896, 5945, 6488
 Murphy, R. P., 2621, 4349, 4493
 Murray, H. T., 26
 Murray, J., 4665
 Murray, J. C., 995, 1018, 2761, 2767
 Murtasow, *see* Murtazov
 Murtazov, T., 3347
 Murthy, B. N., 637, 651
 Murty, B. N., 646
 Murty, B. R., 1846, 2442, 3489–90, 4787, 4799, 6293, 6733, 6747
 Murzakova, K. F., 5867
 Murzamadieva, M. A., 2444
 Musaev, N. I. O., 5906
 Musgrave, R. B., 4167
 Mushib-ud-Din Khan, 1915–7, 1936–7, 1947
 Musienko, S., 4563
 Musijko, A. P., 6006
 Musijko, A. S., 4110
 Musinova, O. B., 1389
 Mustafaeva, S. I., 6016
 Mustaev, A. M., 3249
 Mustanov, G., 2770
 Mutavčiev, M., 6163
 Muthaiyan, M. C., 6616
 Muto, A., 5089
 Myatt, R., 808
 Myers, O. (Jun.), 498
 Myhre, D. L., 4177
 Mynbaev, T. T., 4096
- NABOS, J., 2441
 Nadal, J., 6949
 Nadir, M., 4940
 Nagai, K., 1259
 Nagaraja Rao, K. S., 3083
 Nagaraja Rao, R., 618
 Nagaratnam, A. K., 6346
 Nagata, S., 4198
 Nagata, T., 5288
 Nagel, C. M., 2319
 Nageswara Rao, P., 6563, 2758
 Naghiu, V., 7134
- Nagibin, Ja. D., 6568
 Nagornaja, N. M., 5824, 5825
 Nagovicyna, A. V., 5887
 Nagy, Á., 4153
 Naim, M. S., 4655, 6581
 Naithani, S. P., 2449, 6404
 Naito, R., 3172
 Najdenova, I. N., 5742, 5747
 Nakagawa, M., 2411
 Nakai, S., 5334
 Nakai, Y., 5973, 5974
 Nakagawa, H., 7129
 Nakajima, G., 3938
 Nakajima, T., 5122
 Nakamura, H., 1731
 Nakamura, T., 3806
 Nakane, A., 2034, 6327, 6351
 Nakano, R., 2879
 Nakao, S., 4690
 Nakayama, R. M., 1295, 1563
 Namba, H., 3296
 Namkoong, G., 5059, 6994
 Nand, D., 1371
 Nanda, D. K., 549, 552
 Nandpuri, K. S., 7074
 Nand Singh Mann, 6614–5
 Narain, A., 2287
 Narain, P., 1797
 Narasimhan, P., 4947
 Narasimhaswamy, R. L., 6712
 Narayana, C. L., 1132
 Narayanan, S. S., 2777
 Narayanaswamy, P., 6346
 Narbut, S. I., 1504
 Narimov, S., 2066
 Narita, K., 7008
 Narkevič, A. N., 164
 Nark Potan, 970, 2741
 Narula, P. N., 2404, 4013, 4213, 6250
 Naruševič, P. M., 6206
 Narváez, I., *see* Narváez M., I.
 Narváez M., I., 334–5, 5976
 Naseer Ahmad, 1948
 Nashed, N., 3453
 Nasim, A., 3566
 Našinec, J., 4170
 Nasr, H. G., 675
 Nasrallah, M. E., 3503, 7046–7
 Nass, H. G., 6119
 Natarajan, A. T., 115, 141, 618, 1855, 4230
 Natarajan, B. V., 6603
 Nath, N., 5015
 Nath, P., 4688
 Nathawat, K. S., 3977
 Natho, G., 4163
 Natti, J. J., 5143
 Nauman, C. H., 3595
 Naumov, K. I., 5285
 Navakodi, K., 6741
 Navalihina, N. K., 849
 Navalikhina, *see* Navalihina
 Navasaitis, M., 5088
 Navasajtis, M. Z., *see* Navasaitis, M.
 Naveh, A., 4418
 Naveh, Z., 5295
 Navroc'ka, N. B., 506
 Nayar, N. M., 27, 712, 726
 Nazabat Islam, S. M., 6704
 Nazarov, V. I., 6788
 Nazeer Ahmad, 1918–20
 Nazemille, A., 6921
 Nazirov, N. N., 2065, 2067, 2759
 Neagu, M., 3167, 3193, 3195, 6040, 6753
 Neagu, M. I., 3143
- Neal-Smith, C., *see* Neal-Smith, C. A.
 Neal-Smith, C. A., 2554, 2586
 Neary, G. J., 169
 Neas, M. O., 2877
 Nečaev, A. P., 520
 Nečas, J., 497, 611, 2708
 Nečiporenko, N. A., 4732
 Nedelčev, N., 1376
 Nedelea, G., 6032, 6040
 Nedov, P. N., 5751, 5754
 Negi, S. S., 1374, 5022
 Negoescu, M., 386
 Negoită, V., 512
 Negomireanu, V., 1658, 3400
 Negovskij, N. A., 1094
 Negreanu, E., 3193
 Negrilă, A., 4894–7, 4912
 Negru', A. M., 3166, 5009–10
 Negulescu, F., 2265, 5686
 Negulesku, *see* Negulescu
 Nei, M., 1799–800
 Neischulz, A., 3687
 Nekrasov, V. I., 6787
 Nelson, E. J., 4335
 Nelson, J., 609
 Nelson, O., 11
 Nelson, R. R., 757
 Nelson, W. L., 1978
 Némec, B., 3482
 Nemlienko, F. E., 5666–7
 Nemolovskaja, T. B., 5677
 Neofitova, V. K., 4676, 5838
 Neogy, A. K., 1049
 Nepyšnevskij, M., 2426
 Nersesjan, P. M., *see* Nersesyan, B. M.
 Nersesyan, B. M., 2884
 Nery, J. P., 1120
 Nesterov, Ja., 6845
 Nethery, A. A., 3598
 Nettancourt, D. De, 5188
 Nettevič, Ė. D., 337, 339, 343, 6258
 Nettevič, *see* Nettevič
 Neubauer, J., 850
 Neumann, U., 4898
 Neve, R. A. 1179–80, 1182, 6776
 Neves, O. S., 1021
 Nevzgodina, L. V., 3278
 Newell, L. C., 2562
 Newton, J. P., 4394
 Nguen Lok, 4458
 Ni, C.-L., 642
 Niaz Ali, 6824
 Nica, O., 1117
 Nichal, W. K., 4635
 Nicholls, A. G., 6430
 Nicholls, C. F., 2729
 Nicholls, J. W. P., 6989, 6993, 6997
 Nickerson, N. H., 6167
 Nicklas, R. B., 5412, 5413
 Nicolae, C., 2245
 Niehaus, M. H., 4283
 Nielsen, C. H., 4041
 Nielsen, E. L., 761, 4364, 4381
 Nielsen, L. W., 4612
 Nienstaedt, H., 1480
 Nietsch, H., 5490
 Nieuwhof, M., 1497, 5118, 5152, 5446
 Nigmatullin, F. G., 6245
 Nihal Notani, 70
 Niimoto, D. H., 1050
 Niitsu, T., 162–3
 Niizeki, H., 4336
 Nijdam, F. E., 7239
 Nijnepuu, E., 2666
 Nikam, B. G., 4639

- Nikiferova, N. A., 5722
 Nikitenskij, Ju., 1078
 Nikitin, G. P., 2977
 Nikitina, K. V., 1695, 5731
 Nikitina, N. S., 2977
 Niklaus, P., 5952
 Nikolaeva, M. I., 5726
 Nikolov, E., 2857
 Nikolov, H., 1742
 Nikolov, N., 7092
 Nikol'skij, Ju. K., 5517
 Nikoro, Z. S., 349, 604
 Nikov, M., 1376, 1382, 5032
 Nilan, R. A., 630, 5596
 Niloy Kumar Das, 4971
 Nilson, L. R., 2136
 Nilsson, B., 3203
 Nilsson, F., 4860
 Ninan, C. A., 1852
 Nišćij, I. A., 4251
 Nishi, S., 5142
 Nishikawa, K., 3957
 Nishio, K., 2411
 Nishioka, M., 4342
 Nishiyama, I., 2281, 4053, 4063, 4752, 6102, 7039
 Nittler, L. W., 4538
 Nietzsche, W., 779, 4435
 Nižaraze, A. N., 3126
 Nizuradze, A. N., 1282
 Noble, W. B., 2202
 Nóbrega, P., 225
 Nogovskij, N. A., 2855
 Noiret, J. M., 1221
 Noll, A., 6522
 Noll, C. J., 5540
 Nordestgård, A., 1178
 Norik, I. M., 1075
 Norin, T., 5100
 Norman, A. G., 4401
 Norman, M. J. T., 390, 5582
 Noronha-Wagner, M., 380, 3962
 North, C. J., 6810
 Northcote, D. H., 375-6
 Norton, J. D., 3308, 3774-5, 6841
 Norton, R. A., 6834
 Norton, R. L., 6813
 Norwood, B. L., 6443
 Noshtschev, *see* Nožčev
 Noulard, L., 3949
 Nour, M., 1563
 Nourissat, P., 4391
 Nováček, J., 4602
 Novacký, A., 4036
 Novák, F., 4601, 4608
 Novickaja, E. I., 542
 Novotel'nova, N. S., 6756
 Novotná, I., 35
 Novotný, L., 3288
 Nowacki, E., 1770
 Nožčev, S., 6311
 Nüesch, B., 4360
 Nuland, D. S., 889
 Nunes, A., 6719
 Nunes, M. A., 4323
 Núñez, N. Y. S. de, 3452
 Nusbaum, C. J., 4757
 Nuttall, V. W., 1692
 Nuttonson, M. Y., 1744-5, 5363
 Nuždin, N. I., 2082
 Nuždin, *see* Nuždin
 Nybom, N., 2947, 3620, 4859
 Nyenhius, E. M., 6714
 Nyquist, W. E., 1195, 2616, 4786
 Nyújtó, F., 3044
 O, W.-K., 2534
 Oakes, A. J., 4643-4
 Oakes, M. W., 5376
 Oba, K., 3235, 5089
 Oberle, G. D., 4931
 Obikawa, K., 4095
 Obrázcov, Je. M., 5434
 O'Brien, M. J., 2674
 Obuhova, O. V., 6621
 Ochiai, H., 3611
 Ochoa, C., 929
 Očiauri, D. A., 6801
 Oczosiowa, A., 6699
 Oda, K., 5958
 Oda, Y., 1533
 Odland, M. L., 5540
 Odmark, G., 158, 165, 3597, 3607
 Oehler, E., 3972
 Oelke, E. A., 599
 Oertel, C. R., 5400
 Ofiutt, M. S., 4396, 6419
 Oganessian, S. G., *see* Hovhannisyan, S. K.
 Oganjan, È. A., 2999
 Ognianov, *see* Ognjanova
 Ognjanova, A., 5196
 Oh, *see* O
 Ohba, *see* Oba
 Oizumi, K., 2593
 Oka, H.-I., 2501, 3717-23, 7168-9
 Okabe, K., 3449
 Okabe, N., 5928
 Okabe, T., 4548
 Okada, M., 6335
 Okada, S., 3234, 7008
 Okada, Y., 5089
 Okafor, N., 1124
 Okamoto, K., 5089
 O'Keefe, R. B., 889, 2678
 Okrošidze, E. Ja., 2964
 Oktabr', D., 3951
 Olaizola, L., 4195
 Oldén, E. J., 2948, 4854, 4858
 O'Leary, P., 3859
 Olembo, J. R., 2439, 6281-2
 Ol'hovskaja-Burkova, A. K., 5777
 Olivares, E. O., 4938
 Oliver, C. P., 3526
 Olivero, E. L. G. de, 5327
 Olmo, H. P., 1374, 6784
 Olofsson, B., 2259
 Olsen, H. C., 5074
 Olson, E. O., 1289
 Olson, L. E., 2989
 Olson, R. J., 1993
 Olsson, E. A., 3008
 Olsson, G., 6093
 Oltmanns, O., 5336
 Omar, A. A. M., 444
 Omel'čenko, V. S., 4647
 Ono, S., 4316
 Opeke, L. K., 460, 2897
 Opoka, B., 2888
 Oprea, C., 1380
 Oprea, D. D., 1380
 Oprea, S., 3144
 Oproiu, E., 420, 2152, 2255
 Opsahl, B., 3651, 5448
 Oram, R. N., 794, 5552-4, 5568, 5570
 Orav, T., 144, 613, 1682
 Orazmukhommedov, A., 6464
 Orel, V., 9, 4867
 Orinštejn, Z. A., 5674
 Orlovskij, N. I., 1080, 1111, 1115
 Orlovsky, *see* Orlovskij
 O'Rourke, F. L. S., 1297
 Orr, A. R., 6153
 Orr-Ewing, A. L., 3238
 Ortíz, S., 2726, 4744
 Orton, P., 7034
 Osada, A., 4319
 Oshima, I., 1715
 Oshima, Y., 1715
 Osmanov, A. M., 6825
 Ostapenko, D. I., 4120
 Osterman, S., 4221
 Østgård, O., 6487
 Ostrogskaia, N. A., 5823
 Ostrouško, A. I., 4721
 Ostroushko, *see* Ostrouško
 O'Sullivan, T., 6382
 O'Sullivan, T. J. R., 4201-2
 Oswalt, R. M., 4711
 Otani, A., 5000
 Otărășanu, A., 6041
 Otoul, E., 3389
 Ott, B. J., 4711
 Ottaviano, E., 2347, 6150
 Ou, S. H., 2540
 Ouang, *see* Wang
 Ourecky, D. K., 3113, 4871
 Overčuk, V. I., 4737
 Overlease, W. R., 1444
 Overton, J. R., 3767
 Ovezmuradov, S. O., 6418
 Owa, S., 3307
 Owen, C. R., 2584
 Owens, E. W., 4425
 Ozereckovskaja, O. L., 5900
 Özkan, N., 6663
 Ozol, A. M., *see* Ozols, A.
 Ozola, S. M., *see* Ozols, S.
 Ozols, A., 4155, 6173
 Ozols, S., 5321
 Özyolculer, M., 6663
 PAARDEKOOPER, E. C., 6769
 Paatela, J., 848
 Pacagnini, H. J., 4443
 Pacheco Basurco, J. C., 3433, 5327
 Pacurar, I., 2329-30, 2373, 2463, 4144
 Padda, D. S., 5136
 Paddock, E. F., 1646
 Paden, R. N., 6420
 Padmanabhan, S. Y., 738, 742, 2549
 Paez H., C. J., 4446
 Page, J. B., 4210
 Paglietta, R., 3036
 Pahomova, V. P., 484, 4090
 Pai O., 2515
 Pai, S.-H., 2516, 2546
 Painter, R. H., 455, 1425
 Paiziev, *see* Pajziev
 Pajziev, P., 2063, 6560
 Pak, C.-M., 2802, 2810-11
 Pak, C.-S., 2534
 Pak, P. E., 2550
 Pak, P. V., 5630
 Pak, R.-K., 2516
 Pak, S.-H., 2127, 3075
 Pak, Y.-S., 2534
 Pal, B. P., 2480, 5967, 7238
 Pál, Gy., 7127
 Pál, K., 6639
 Palakarčeva, M., 5899, 6657, 6698
 Palakarcheva, *see* Palakarčeva
 Palamarčuk, A. S., 4716
 Palamar-Mordvinceva, G. M., 7206-7
 Palamar-Mordvintseva, *see* Palamar-Mordvinceva

- Palaniandi, V. G., 2452
 Paleg, L. G., 4255
 Palenzona, D. L., 100, 1767, 2343, 3348, 7096
 Pálfi, G., 4344
 Palilova, A. N., 564, 5516, 6191
 Palmer, A. F. E., 4167
 Palmer, J. L., 957
 Palmer, T. P., 5284
 Palmer-Jones, T., 6804
 Paludan, N., 4830, 5233
 Pammer, F., 5487
 Panaitescu, V., 4136
 Panasjuk, N. V., 1711
 Panda, B. S., 4683
 Pandalai, K. M., 1327, 3086
 Pandele, I., 3074, 3172
 Pandey, K. K., 6674
 Pandey, Y., 7157
 Pandit, S. V., 6363
 Pandya, P. S., 6564
 Panella, A., 826
 Panić, M., 691
 Panin, V., 1773
 Panjan, M., 2391
 Pannone, R., 1148
 Panopoulos, N. J., 3300
 Panova, P., 3128
 Pant, J. C., 2390
 Pant, N. C., 2390, 6322
 Panton, C. A., 838, 4380, 6439
 Papa, K. E., 149
 Papathanasiou, G. A., 1195, 4786
 Papellada, E., 3926
 Papenhagen, F., 6460
 Papiev, K. A., 568
 Parádi, L., 6155
 Parameswar, N. S., 6471
 Pardee, W. D., 2324, 3393
 Parish, A., 6236
 Parish, J. A., 6088
 Park, *see* Pak
 Park, B. E., *see* Pak, P. E.
 Park, J.-M., *see* Pak, C.-M.
 Park, L. K., *see* Pak, R.-K.
 Parker, J. H., 3508
 Parks, C. R., 1159, 6576
 Parlavecchio, M. R., 559
 Pärnik, T., 853
 Parodi P., P., 370, 447, 454, 2173, 4034
 Parodi, R. A., 4261–2, 4274
 Parrini, P., 4419–20
 Parups, E. V., 2634
 Pasenkov, A. K., 6865
 Paškar', S. I., 5627, 5704
 Pasquier, R. du, 4831
 Passos, O. S., 4941
 Pastena, B., 6934
 Pastorek, M., 4002
 Pastoriza, A. E. de, 3451
 Pastoriza, R., 3451
 Pastušenko-Strelec, N. A., 2082
 Pastushenko-Strelets, *see* Pastušenko-Strelec
 Pásztor, Gy., 5209
 Patel, C. T., 6564
 Patel, P. N., 1627
 Patel, R. A., 4617, 6760
 Patel, R. M., 6760
 Paterson, D. N., 5532
 Pathak, G. N., 6401, 6740
 Pathak, M. D., 2115
 Patil, B. D., 6406
 Patil, J. A., 3263, 5315
 Patil, S. H., 1843, 1859
 Patil, S. S., 941
 Patrick, K. H., 792
 Patterson, F. L., 2201, 2412–3, 6282
 Patton, R. F., 1427, 1432
 Paul, A. K., 2484, 2521
 Paulech, C., 6276
 Paulechová-Kraliková, K., 3030
 Pauley, S. S., 5101, 6990
 Paulus, A. O., 4660
 Paunović, D., 6109
 Pavate, M. V., 1141
 Pavlek, J. J., 4062
 Pavel'ska, *see* Pawelska
 Pavel'ska, K., 5891
 Pavlek, P., 7060
 Pavlenko, V. V., 7218
 Pavličić, J., 534, 2363
 Pavlov, I. F., 5633
 Pavlova, M. A., 3108
 Pavlovskij, E. N., 3830
 Pawar, M. S., 4289
 Pawelska, K., 5890
 Pawlisch, P. E., 2278
 Paxton, J. D., 7171
 Pčelarov, V., 3412
 Peacock, H. A., 2793
 Peak, J. W., 2646, 5577
 Pearson, G. A., 2538
 Pécaut, P., 7118
 Pedersen, M. W., 1994, 4369, 6429
 Pedersen, P. N., 6279
 Padraza González, R., 1364
 Peens, J. F., 6700
 Pegenia, M. R., 1063
 Pegg, K. G., 4939
 Pegler, R. A. D., 783
 Peitel, M. J., 6918
 Pejkić, B., 3669, 5475
 Pejovics, B., 3016, 4959
 Pelet, F., 1541
 Pelham, J., 1591
 Pelikán, M., 6045
 Peloquin, S. J., 928, 2698, 6496
 Pelshenke, P. F., 3621
 Penčić, M., 6193
 Penčić, V., 534
 Pendery, W., 2392
 Pendurty Krishna Mohan Rao, 2416
 Penella, J. S., 6785
 Penev, S., 6868
 Peneva, P., 5269
 Peplinski, A. J., 2470
 Perakliev, D., 5597
 Perceali, G., 6726, 7019
 Peregudt, M. F., 1500
 Pereira, A. S., 1120
 Perera, K. P. W. C., 6708
 Perera, S. M. D., 1635
 Perera, V. H., 6708
 Peresypkin, V. F., 5614–5, 5657, 5844, 5876
 Peretjat'ko, V. G., 1105
 Pereverzev, D. S., 555
 Pérez-Navarro y Flórez-Estrada, A., 3892
 Pérez-Nieves, C., 4911, 4943
 Peries, O. S., 4835
 Perju, T., 6530
 Perkins, A. T., 4421
 Persecă, E., 6494
 Persson, A. E., 5444
 Persson, A. R., 3649
 Persson, E., 2300
 Perttula, O., 279, 482, 605, 882
 Perttula, O. M., 4049
 Perunskij, Ju. V., 451
 Perunova, T. V., 332
 Pešev, N., 569
 Pešho, G. R., 2389
 Pešić, M., 6867
 Péterfi, S., 2224
 Peterson, D. M., 500
 Peterson, E. K., *see* Pétersons, E.
 Peterson, G. A., 649, 6228
 Peterson, J. L., 5961
 Peterson, L. C., 923, 4566
 Peterson, P. A., 28, 98, 2315, 2349
 Pétersons, E., 4155
 Petkov, G., 1378, 3190
 Petkov, K., 4999
 Petkov, T., 2469
 Petkova, T., 3319
 Petkow, *see* Petkov
 Petr, F. C., 462, 627, 4057, 6090
 Petrakieva, I., 1636, 1662
 Petreanu, F., 6210
 Petrescu, C., 1560
 Petrik, M. I., 7183
 Petrosjan, A., 2334
 Petrov, D. F., 1827–8, 2076, 5430–1
 Petrov, Ju. A., 6826
 Petrov, M., 1446, 5067
 Petrov, P., 606, 2430, 6271
 Petrova, I., 7175
 Petrova, K. A., 5990
 Petrušina, M. P., 4726
 Petuhova, I. P., 6969
 Pežemskaja, T. A., 392
 Pfahler, P. L., 2295–6
 Pfeifer, R. P., 643, 2169
 Pharis, R. P., 5113
 Phatak, S. C., 1581
 Phillip, M. J., 3354
 Philipp, A., 5350
 Philippova, *see* Filippova
 Phillips, J. H., 1786, 7221
 Phillips, L. J., 5582
 Phillips, L. L., 1009–10
 Phillips, S. H., 1641, 7162
 Philouze, J., 7118
 Phinney, B. O., 3434
 Picard, J., 3643, 4361, 4363, 5438
 Pichenot, M., 2907
 Pickett, B. S., 2975, 3006
 Pickett, R. C., 2591
 Pickett-Heaps, J. D., 375–6
 Picu, I., 1658, 3400
 Pidozers'kyj, S. M., 7158
 Piegat, M., 6528–9
 Piendl, A., 6267
 Pieniążek, J., 2991
 Pieniążek, S. A., 2983, 6830
 Pieritz, W. J., 346
 Pietrarelli, J. R., 4961
 Piglionica, V., 6871
 Pinchinat, A. M., 3382
 Pinkas, L. L. H., 2432, 4256
 Piovareći, A., 6219
 Pjorol, L., 2250, 2371
 Pirone, T. P., 1589
 Pirson, H., 2650
 Pisani, P., 4935
 Pisarenko, M., 3302
 Pisarev, V. E., 248
 Pisar'kova, M. A., 4112
 Pițuc, P., 3167, 6943
 Pivorunas, J., 4356, 4519
 Pivorunas, I., *see* Pivorunas, J.
 Piza, S. de T. (Jun.), 1782
 Pjarnik, *see* Pärnik

- Plaisted, R. L., 923, 4566
 Plank, J. E. van der, 934, 6504
 Platonova, L. N., 6570
 Plehanova, T. F., 6512
 Plessers, A. G., 396, 2795
 Pliszka, K., 6894
 Plock, H., 4916
 Plotnikova, Ju. M., 5901
 Plotnikova, N. I., 1257
 Plu, A., 4769
 Plučennik, G., 1718
 Pochar, E., 2905
 Pochier, G., 750
 Poenaru, I., 3195
 Pogodina, O. N., 146
 Pogorelov, P. F., 4983
 Pohlit, W., 5341
 Poisson, C., 2756
 Pojarkova, E. N., 760
 Pokhriyal, S. C., 4788, 6291
 Pokrovskaja, A. S., 6782
 Pokrovskaja, N. F., 3940
 Pokrovskaya, *see* Pokrovskaja
 Polák, O., 1476
 Poliakova, *see* Poljakova
 Polimbetova, F. A., 402, 6058
 Poliščuk, V. K., 5646
 Polivcev, F. P., 5743
 Poljakov, I. M., 1805
 Poljakova, T. F., 1808
 Poljanskaja, L. A., 6567
 Polk, R. B., 5101
 Pollard, E., 138
 Pollard, L. H., 5280
 Pollhamer, E., 6251
 Pollhamer, Zs., 3981
 Polovinkina, E. V., 603
 Polsinelli, M., 1785
 Polson, D. E., 1626
 Pomazkov, Ju., 5787
 Pomoščnikova, N. A., 1713
 Pompeu, A. S., 1616
 Ponamarev, A. S., 3095
 Pond, D. D., 2724
 Ponirovskij, V. N., 5618
 Ponnaiya, B. W. X., 1201, 4257, 4444, 6297, 6302
 Pop, E., 1117, 2143
 Popa, E., 3194
 Popa, P., 3047
 Popa, T., 386
 Popa, V., 2951-2, 3199
 Pope, W. K., 1995
 Popel', A. T., 6640
 Popenoe, W., 2018
 Popescu, C. V., 2980
 Popescu, G., 1377, 3167, 4896
 Popescu, O., 203
 Popkova, K., *see* Popkova, K. V.
 Popkova, K. V., 900, 5690, 5895
 Popov, A., 422
 Popov, P., 1176, 1893, 4963
 Popov, P. V., 1024
 Popova, A. F., 1339
 Popova, D., 1584
 Popova, I. S., 7192
 Popova, I. V., 5795
 Popova, L. S., 1712, 5331
 Popova, M., 1223
 Popova, T. T., 5909
 Popović, A. O., 99
 Popović, M., 7088
 Popović, S., 653
 Popovich, M., 3414
 Popovici, I., 156, 930, 1503
 Popowa, *see* Popova
 Popušoj, I. S., 2992, 5813-4
 Porembskaja, N. B., 6470
 Porjadkova, N. A., 1684
 Porsche, W., 4531
 Porter, C. L. (Jun.), 4445
 Porter, W. K. (Jun.), 4626
 Portolano, N., 6837
 Posmogova, *see* Pozmogova
 Posnette, A. F., 3041
 Pospelov, V. F., 5064
 Pospíšil, J., 1454-5
 Postlethwait, S. N., 537-8
 Potapov, S. P., 2966, 4920
 Potlajčuk, V. I., 5658
 Potlog, A. S., 6040
 Potočanac, J., 313
 Potter, J. M. S., 1244
 Potts, H. C., 806, 6408
 Pound, G. S., 5124
 Pousi, M. P., 4517
 Povilaitis, B., 1140, 2872
 Powell, J. B., 657-8, 767-8, 2597, 4258, 4393
 Powelson, R. L., 1988
 Pozmogova, I. N., 5338
 Prabhakara Reddy, G., 6739
 Prabir Chatterjee, 1819
 Prabhu, A. S., 453
 Prahlada Rao, L. S., 3547
 Prakasa Rao, S. V. S., 2506
 Prakash, R., 7126
 Prakken, R., 5380
 Prasad, A., 1371
 Prasad, N. K. S., 4641
 Prasada, R., 445, 453, 6213
 Prasada Rao, U., 2489
 Pratt, G. A., 798
 Predescu, G., 6843
 Prendergast, A. G., 302
 Preoteasa, C., 3378
 Pressley, E. H., 2750
 Prestemon, D. R., 6982
 Preston, R. D., 183-4
 Priadencu, A., 2179, 6253
 Price, J. M., 5201
 Price, P. B., 6230
 Price, S., 2829
 Pridham, T. G., 5329
 Prien, H.-G., 4724
 Priestley, W. G., 5149
 Priezjev, G. V., 6084
 Primavesi, A., 5607
 Primavesi, A. M., 5607
 Princ, Ja. I., 5755
 Pring, D. R., 654
 Privalov, G. F., 1240, 2078
 Prjadčenko, *see* Priadencu
 Probst, A. H., 7161
 Procenko, A. E., 5631
 Procenko, L. V., 5720
 Procenko, N. G., 2807-8
 Prochownik, M., 6661, 6695
 Proctor, J. R., 2634
 Prodán, G., 1241, 1285, 1346, 3124, 5004, 6838
 Proitschew, *see* Projčev
 Projčev, S., 526
 Prokof'ev, M. A., 5776
 Prostjakova, R. A., 108
 Prostjakova, *see* Prostjakova
 Protá, U., 3080
 Protopopova, E. M., 119
 Provaglio, G., 1197
 Prugar, J., 404
 Psareva, E. N., 5812
 Psareva, V. V., 5712
 Ptchélaroff, *see* Pčelarov
 Pucarić, A., 6195
 Puchalski, P., 4660
 Pučkov, Ju. M., 388
 Puglisi, P. P., 3443, 7226
 Pugsley, A. T., 2165
 Puhai'skij, V. A., 3978, 5980
 Pundir, N. S., 4633, 6555
 Purcell, C. M., 3356
 Purdy, J., *see* Purdy, J. L.
 Purdy, J. L., 6118-9
 Purdy, L. H., 441, 1996, 6063
 Puri, Y. P., 687, 2813
 Purohit, D. C., *see* Purohit, D. S.
 Purohit, D. S., 700, 2485
 Puşcaş, M., 6041
 Pushkarnath, 27, 1841, 2690, 6502
 Pustovojt, G. V., 5738
 Pustovojt, V. S., 1210
 Putt, E. D., 1211
 Pyhtina, T. K., 5594
 Pyl'nev, V. M., 6035
 Quadri, M. I., 4787, 6733
 Quagliotti, L., 3271, 7023, 7128
 Qualset, C. O., 487, 655, 2401, 6270
 Quast, D. G., 576
 Quick, J. S., 2591
 Quicke, G. V., 2395
 Quinby, J. R., 683, 4278
 Quinn, C. J., 5994
 Quiñones, M. A., *see* Quiñones L., M. A.
 Quiñones L., M. A., 334-5, 5976, 5986
 Quintanilha, A., 40, 6554
 Qureshi, M. A., 1929
 RABINDRA KRISHNA BASU, 4682
 Rachie, K. O., 692, 1835, 2119, 2598
 Rachinski, *see* Račinski
 Racinski, T., 360, 372, 3909, 5979
 Raczynski v. O., M., 454
 Radha, K., 1325
 Radionenko, A. Ja., 1271, 4890
 Radionenko, A. Y., *see* Radionenko, A. Ja.
 Radler, F., 6932
 Radov, A. S., 4178
 Radu, A., 5178
 Radu, M., 156
 Rădulescu, E., 2265, 5686
 Rădulescu, F., 1186
 Radulov, L., 3198
 Radulow, *see* Radulov
 Raeber, J. G., 6646-52
 Rafailé, K., 5740
 Rafay, S. A., 4910
 Raflares, B., 1063
 Ragab, A. H., 1204
 Ragazzini, R., 1574
 Raghunathan, R., 5007
 Raghuvanshi, S. S., 5139, 7201
 Ragimov, I. R., 5898
 Raheja, P. C., 2251
 Rahmankulov, S., 6141
 Rahmetova, G. O., 5982
 Raianu, M., 2371, 2373
 Raicu, P., 39, 116, 156, 1503, 3665, 5170, 5470
 Raj, A. S., 457
 Raj, A. Y. D. S., 442
 Raj, J. S., 6644
 Rajagopalan, K., 2504, 2523
 Rajagopala Reddy, V., 6339

- Rajamani, A., 6546
 Rajan, S. S., 1858
 Rajasekaran, S., 4703
 Raja Walayat Hussain, 1445
 RajBhandary, U. L., 57
 Rajendren, R. B., 6716
 Rajhathy, T., 2284, 4060, 6091, 6098
 Rajher, I. H., 6930
 Rajinder Bir Kumar Bammi, 1336
 Rajinder Singh, 3267
 Rajki, E., *see* Rajki Cicer, E.
 Rajki, S., 2225, 3672, 3925, 5468, 6010
 Rajki Cicer, E., 7127
 Rajkov, E., 5741
 Rajku, *see* Raicu
 Rajpulis, E. P., 3518
 Rajput, D. D., 6291
 Ram, J., 6348
 Ram, R. N., 2768
 Ramachandran, M., 3081
 Ramakrishnan, P. K., 2777
 Rama Krishna Rao, K., 2788
 Raman, V. S., 1201, 3084, 4272, 4444, 6331
 Ramanarao, V. V., 1132
 Ramanna, M. S., 115, 1855
 Ramanujam, S., 1189, 1830, 6728, 7202
 Ramaswamy, N. M., 6741
 Ramazjan, R. A., 3182
 Ramesh Datt Parashar, 6060
 Ramey, H. H., 991
 Ramiah, K., 2479
 Ramirez, D. A., 731
 Ramirez, O. D., 1333, 3137
 Ramirez-Medina, A., 148
 Ramišvili, P. M., 2141
 Ramkrishna Rao, J., 2529
 Rammelt, R., 4008
 Ramos, N. E., 4579
 Rana, M. S., 6238
 Rana, R. S., 2424, 4238
 Rancžalis, V. P., 1613
 Randall, T. E., 1592
 Randhawa, G. S., 3161, 3176, 4991, 5015, 5022
 Rane, D. A., 1375
 Rangaiah, P. K., 2488
 Ranganathacharyulu, N., 6563
 Ranga Reddy, B., 6933
 Rangaswami, G., 5007
 Rangaswamy, N. S., 184
 Rangel, C., 913
 Rangelov, B., 1382
 Ranjit Singh Jolly, 3426
 Ranjit Singh, S., 2447
 Rank, G. H., 1104
 Rao, C. U., 1809
 Rao, G. R., 3357
 Rao, H. K. S., 1839
 Rao, J. T., 2828
 Rao, N. G. P., 4263
 Rao, N. S., 1856
 Rao, P. N., 1189
 Rao, S. B. P., 6291
 Raper, J. R., 1707-8, 3466
 Rapoport, I. A., 3478, 7229
 Rapoport, J. A., *see* Rapoport, I. A.
 Ražinskaitė, D., 5326
 Ražinskajė, D. K., *see* Ražinskaitė, D.
 Rasmusson, D. C., 645, 2405, 2433, 6229
 Rassadina, E. G., 5645, 6074
 Ratcliffe, R. H., 4464
 Ratnakar, B., 6739
 Rauser, W. E., 1661
 Raut, R. N., 107, 1572
 Ravantti, S., 843, 4383
 Ravenscroft, A. V., 4660
 Ravindranath, K., 6549
 Rawlings, C. E. B., 2230
 Ray, L. L., 1012, 4645
 Raymer, W. B., 2674
 Raypulis, *see* Rajpulis
 Read, D. W. L., 250
 Read, J., 3605
 Read, R. A., 5101
 Read, R. A., 6958
 Read, R. W., 1315
 Rebandel, Z., 1360
 Rebuck, A. L., 6950
 Reddy, P. A. J., 1554
 Reddy, V. R., 2539
 Rédei, G. P., 1774
 Red'kina, Z. V., 3418
 Rédulesku, *see* Rădulescu
 Ree, *see* Ri
 Ree, J.-H., *see* Ri, C.-H.
 Reed, J., 6222
 Reeder, J. R., 6371
 Rees, H., 781, 6383
 Reeder, W. F., 3098
 Rehbein, C. A., 3388
 Rehfeldt, G. E., 5092
 Reichert, T., 6998
 Reid, D. A., 626
 Reid, R. L., 4440
 Reig Feliú A., 4911, 4943
 Reimann-Philipp, R., 4081
 Reinach, S. G., 2346
 Reinbergs, E., 2142
 Reisch, W., 6676, 6693
 Rejman, A., 3039
 Remeslo, V. N., 4007
 Rimmelg, H., 1604, 5208
 Remneva, Z. I., 5692
 Renfro, B. L., 662, 692
 Rentschler, H., 3640
 Röstel, G., 4731
 Reutskaja, O. E., 5735
 Revell, S. H., 117, 168, 3479
 Reynolds, J. D., 5300
 Reynolds, J. F., 5356
 Rhoades, M. M., 2350
 Rhodes, A., 3464
 Rhodes, A. M., 1194, 2398
 Rhodes, B. B., 498
 Ri, C.-H., 1038, 2128, 2499
 Ri, C.-Y., 2515, 2546
 Ri, E.-K., 2545, 2550
 Ri, K.-H., 2145
 Ri, M.-S., 2533
 Ri, M.-T., 3075
 Ri, P.-S., 3227
 Ri, S.-C., 2545, 2547, 2550
 Ri, Y.-M., 2127
 Ribagin, T., 672
 Ribas, W. C., 4975
 Ribeiro, M. A. M. do V., 4024, 4675
 Ricci, A., 5171, 7078
 Rice, J. S., 2657
 Rich, A. E., 6531
 Richards, A. V., 2890
 Richharia, R. H., 2507
 Richmond, T. R., 1012, 4645, 6552
 Rick, C. M., 24, 29, 1578, 3328, 3502, 7109
 Rickards, G. K., 5414
 Ridley, E. J., 428
 Riedel, L., F., *see* Farkas Riedel, L.
 Riedl, W. A., 2677
 Rieger, R., 166
 Riemann, K.-H., 7037
 Riepma, P., 1676, 1687
 Rietsema, J., 6682
 Rigó, K., 4119
 Riker, A. J., 1432
 Riley, H. P., 7231
 Riley, R., 38, 378-9, 632, 1750, 3935, 3959, 4082
 Rillo, A. O., 452
 Rîman, L., 5949, 6048
 Rincker, C. M., 766
 Rios, B., M. J., 5963, 6019
 Risser, G., 3121
 Rițiu, C., 4894
 Rițiu, I., 7113
 Ritter, A. A., 5514
 Riva, E., 4280
 Riva, S., 1787
 Rivera G., J. A., 583
 Rivers, J. M., 281
 Rizescu, S., 5174
 Rizinski, S., 1587
 Rjabinina, M. I., 565
 Rjabov, I. N., 1280
 Rjabova, A. N., 1280
 Rjazanceva, G. N., 5901
 Rjulina, N. A., 522
 Rjurikov, N. A., 7188
 Roach, F. A., 1342
 Roane, C. W., 625, 4253
 Robards, G. E., 795
 Röbbelen, G., 79, 1518, 3504
 Roberts, B. J., 2291-2
 Roberts, E. C., 4401
 Roberts, H. M., 1867, 1877
 Roberts, R. H., 249
 Roberts, T. H. (Jun.), 2168
 Robertson, A., 3537, 3555
 Robertson, D. S., 3505, 6175
 Robertson, D. W., 6243
 Robertson, L. D., 381
 Robichon-Szulmajster, H. de, 3440-1
 Robins, F. M., 682
 Robinson, H. F., 495, 1845, 2355, 699
 Robinson, R. G., 6757
 Robinson, R. W., 3328
 Rocha, H. M., 1174, 2899, 4779
 Rocha, J. L. V., 1202
 Rocha, T. R., 1161
 Roche, P., 2492
 Rod, J., 834, 4505
 Rodenburg, C. M., 1539
 Rodić, Z., 6914
 Rodigin, M. N., 5721
 Rodina, N. A., 6254
 Rodrigues, L. C., 4675, 4750, 5167
 Rodríguez, M. F., 6707
 Rodríguez, R., *see* Rodríguez R., R.
 Rodríguez Amieva, R. J., 5959
 Roemer, K., 2984
 Rogaš, A. R., 4670, 5836, 6585
 Rogaš, Ju. I., 2796
 Rogers, H. H., 754, 4352
 Rogers, I. S., 3345
 Rogers, V. E., 796
 Rohde, C. R., 2205
 Rohewal, S. S., 1696
 Rohloff, I., 3295
 Röhrig, E., 5102
 Rohweder, D., 4494
 Rojngard, T. A., 5627
 Rokosh, D. A., 5391
 Roman, A., 5957

- Roman, D., 4895-6
Roman, E., 1186
Roman, L., 2326
Roman, T., 6650, 6661, 6673, 6680, 6688
Romberg, L. D., 4952
Romenskij, N. V., 542
Romero, G. E., 467
Romig, R. W., 2291
Rommel, M., 1102, 1110, 2859
Rondon, M. R., 440, 446
Rosado, J. M. de C., 3574
Rosania, A., 4615
Rosas, G. S., 1654
Rosati, P., 1350, 1352, 4996-7
Rosbaco, A. de M. de, 4798, 4800, 4802
Roselli, G., 6827
Rosenberg, M. J., 3570
Roskams, M. A., 5563
Ross, G. L., 2324
Ross, J. M., 1226, 6766
Ross, J. P., 1650
Ross, R. G., 6809
Ross, R. W., 6509
Rossi, J. C., 2309
Rossiter, R. C., 862
Rossouw, D. J., 6700
Röstel G., *see* Röstel G.
Röstel, H. J., 1095
Rostova, N. S., 1229
Rostovceva, T. S., 6170
Rostovtzeva, *see* Rostovceva
Rotar, P. P., 805
Rotem, J., 5933
Roth, G., 3062
Roth, L. F., 1419
Roth, T. F., 3602
Rothacker, D., 2699, 4592
Rothman, P. G., 3954, 4069
Rousi, A. 3647, 4988, 5442
Roussel, N., 1073, 6624
Roux, M. S. le., 3152
Rowe, P. R., 2676, 2697, 2707
Roy, K., 1046, 2902, 4683
Roy, M. K., 6213
Roy, R. D., 5083
Roy, R. P., 800
Roy, S. K., 1847, 2483
Rowe, P. R., 895
Rozenfeld, Ja., 7165
Ru, *see* Lu
Rubcova, M. S., 4131
Rubin, B. A., 5620, 5843
Rubis, D. D., 1219, 1997
Rud', V. D., 1108
Rudder, J. D., 1530
Ruddle, F. H., 1824
Rudenko, L. P., 5673
Rudenko, M. I., 3950
Rudneva, S. V., 1608
Rudorf, W., 5270, 5593
Ruebenbauer, T., 535, 2089
Ruggieri, G., 3058
Rui, D., 4875
Rumi, V. A., 4646
Rundaeva, V., 5723
Runkova, L. V., 6111
Runner, M. H., 5540
Ruppel, E. G., 1230
Rusaleev, A. P., 2660
Rusanovschij, G., 2208
Rusmini, B., 5978
Russell, G. E., 1118, 3657, 4738-9, 5454, 6643
Russell, R., 5164
Russell, W. A., 562, 2386, 4152
Russell, W. J., 980, 4481
Russo, S., 6328, 6343
Ruszkowski, M., 6114
Rutger, J. N., 521, 644, 6246
Ruzinov, P. G., 7048
Ryan, G. S., 3890, 4017
Rybakova, V. D., 3898
Rybin, V. A., 4855
Rybin, W. A., *see* Rybin, V. A.
Rychlewski, J., 6497
Rydkin, V. A., 5093
Rysbaeva, A. S., 5826
Ryynänen, A., 6906
Ryževa, O. I., 4801, 5911
Ržanova, E. I., 5242
Rzhanova, *see* Ržanova

SAAKJAN, G. A., *see* Sahakyan, K. A.
Saari, E. E., 6380
Saariste, V., 7103
Šabalina, V., 3253
Šabanova, A. M., 5882
Sabet, K. A., 592-3
Šab hazov, V. G., 6631
Saboe, L. C., 366
Sačanski, S., 2469, 5251, 7174
Sacco, J. da C., 4610
Sachanski, *see* Sačanski
Sackett, R. G., 2325
Sackston, W. E., 260
Sacristan, M. D., 4529
Sadanaga, K., 6106
Sadasiyaiah, R. S., 2466, 4276, 6314
Šadmanova, N. A., 5830, 5903
Sadovnikova, V. L., 2723
Sadykov, S. S., 6569
Šafar, O., 7224
Safarjan, *see* Safaryan
Safarov, Š. A., 5904
Safaryan, H. E., 5965
Safaryan, I. M., 1547
Safin, M. K., 2084, 2299
Safonova, U. T., 121
Sagatunova, T. N., 2381
Sage, G. C. M., 5948
Sagutunova, T. N., 6144
Sahakyan, K. A., 3349
Sahanova, R., 5895
Saharov, È. I., 6791
Sahasrabudhe, M. R., 6764
Sahay, R. K., 2246
Šahbazov, V. G., 2104, 6640
Sahni, V. M., 2757, 2766, 4663
Saho, T., 3612-13
Saidov, D., 3294
Saied Ahmad Malik, 1905
Saikia, B. N., 6869
Šain, S. S., 2061
Saini, S. S., 6348
Saio, K., 3808
Sajó, Z., 4313, 4341
Sajutin, I. F., 3695
Sakai, A., 5070
Sakai, K.-I., 3724-27, 3730-1, 3732
Sakamoto, S., 2803, 3711-3, 4044, 4450-2
Saksena, S. S., 3419
Sakurai, Y., 2551
Salamatov, M. N., 4913
Šalamberidze, H. B., 6196
Salazar, C. G., 1288, 6853
Šaldžjan, L. K., 5804
Saleeb, W. F., 4944
Salem, A. A., 1126
Salgalov, V. K., 4983
Šalin, Ju. P., 4005
Sal'kova, E. G., 5900
Sallans, B. J., 2257
Sallans, H. R., 4793
Šal'man, I. N., 6863
Salokangas, K., 4549, 7173
Salon, T., 732
Saltykova, L. P., 5691, 5702
Salunkhe, D. K., 2989, 4876
Salunskaja, N. I., 5668-9
Salvioli, R. A., 1593
Šämäilä, M., 6753
Samborski, D. J., 2289, 4032
Samiano, S., 1063
Šamina, S. B., 118
Šamina, Z. B., 6685
Samorodova-Bianki, B. G., 3641
Sampath, S., 712, 728, 2497
Sampson, D. R., 3286, 5150, 7028, 7038
Samra, A. S., 592-3
Šamraj, O. F., 2358
Samsel', N. V., 2986
Šamsiev, K. Š., 6953
Samveljan, G. E., *see* Samvelyan, K. E.
Samvelyan, K. E., 3175
Sánchez-Monge y Parellada, E., 3456, 3548, 3552-53, 3926, 3974
Sancho, R., 5090
Sand, S. A., 3506
Sander, D. A., 394
Sanders, T. G., 513, 3766
Sandke, G., 4893
Sändulescu, N., 4582
Sanduljak, J., 3472
Sanford, J. O., 4177
Sanford, L. L., 885
Sangaiah, M., 4668
Sanghi, A. K., 652
Sanghi, N. K., 6745
Šangin-Berezovskij, G. N., 2082
Sanginov, B., 5818
Sanina, A. V., 1761
San Juan, M. O., 257
Sankar Mitra, 68
Sansavini, S., 1248, 1269
Santamour, F. S. (Jun.), 7004
Santareno, J. A. L. M., 4815
Santelmann, P. W., 4665
Santhanam, V., 1842
Santiago, A., 232
Santiago, J. C., 303, 310, 317, 319
Santurjan, V. S., 6941
Sanyal, S. N., 1819
Šaova, M. D., 6184
Sapetti, C., 1243
Saphonova, *see* Safonova
Šapiro, I. D., 261, 5632, 5684
Šapiro, N. I., 4, 1772
Sarabhai, A., 5379
Sarapuu, E., 3109
Šarašenidze, D., 3012
Sarashima, M., 4789, 6481, 6735
Sarasola Sancho, F. M., 4078
Sarca, T., 600, 2335, 2341, 4143
Sarca, V., 2329-30, 2463, 4144
Sarda, R. P., 5424
Sardul Singh Sandhu, 6615
Sarfraz Ahmad, 1947
Sarisaló, M., 851
Sárkány, I., 4821
Sárkány, S., 1177

Sárkány, S. (Mrs.), *see* Sárkány, I.
 Sarkar, B., 2850
 Sarkar, K. R., 2342, 2369
 Sarkisov, *see* Sarkizov
 Sarkissian, I. V., 525, 6124, 6169
 Sarkizov, M., 4117
 Sarma, *see* Sharma
 Sarma, V. S., 6738
 Sartori, E., 3049
 Sarv, Ja. Ja., 5889
 Sarvella, P., 2353, 2772, 6158
 Sarvella, P. A., 2376
 Saryčev, U. F., 2087
 Saryčev, *see* Saryčev
 Sasai, K., 4019–21,
 Sasamura, S., 4346
 Sastry, G. R. K., 4106
 Šatilov, I. S., 3692
 Sato, C., 3120
 Sato, M., 4224
 Sato, R., 6347
 Sato, T., 6453
 Satokawa, O., 2517, 2542
 Sattarov, B. H., 993
 Satyabalan, K., 1201
 Sauer, C. O., 6166
 Sauer, D. B., 430
 Săulescu, N., 328, 386, 2237, 6031
 Saunders, J. H., 965, 2733
 Saunders, J. L., 4780
 Sauvion, A., 2556
 Šavčenko, N., 2862
 Šavčenko, N. A., 7108
 Savel'ev, V. F., 5677
 Savenko, L. O., 2927, 5910
 Savić, S., 395
 Savinkin, A. T., 2660
 Savinskij, P. I., 5884
 Savitsky, H., 1113
 Savitsky, V. F., 1113
 Šavlovskij, G. M., 1711
 Savov, P., 2762
 Săvulescu, 5846
 Sawa, T., 4337
 Sawada, S., 6105
 Sax, H. J., 1508
 Sax, K., 1508
 Saxena, K. M. S., 6617
 Saxena, N. G., 2925
 Sayers, E. R., 2621–2
 Saylor, L. C., 1474
 Ščagina, A. K., 4169
 Scandalios, H., 3507
 Scandalios, J. G., 2314
 Ščapov, N. S., 1240
 Ščapova, A. I., 86, 2047, 2050
 Scaranari, H. J., 1162
 Scaraschia Mugnozsa, G. T., 351, 2191,
 3648, 5443
 Scarpa, P., 3093
 Ščelko, L. G., 5651
 Ščelokova, Z. I., 581
 Ščepotjev, F. L., 5434
 Ščerbakov, Ju. I., 4417
 Ščerbakov, V. K., 120, 1608, 1818, 5426
 Ščerbakova, N. M., 5705
 Schaap, A. A., 6802
 Schafer, J. F., 2201, 2412–3
 Schaffer, G., 4510
 Schalkwyk, D. van., 431
 Schaller, C. W., 644, 2401, 6332
 Shank, S. C., 804
 Scharf, A., 888
 Scheetz, R. W., 1672
 Schell, P., 1803

Schertz, K. F., 667, 4275
 Scheumann, W., 7011
 Schieber, E., 1166
 Schiebllich, J., 4514
 Schiel, E., 814, 3433, 5327
 Schillinger, J. A. (Jun.), 456
 Schippers, B., 5173
 Schlehuber, A. M., 5972
 Schmid, K., 6690, 6693
 Schmid, P., 1262
 Schmidt, B. L., 1811
 Schmidt, E., 3815, 6255
 Schmidt, H., 1540
 Schmidt, J. A., 410
 Schmidt, J. W., 326, 338, 421, 2174,
 2235, 3916
 Schnathorst, W. C., 2790–1
 Schneider, H., 1096
 Schnell, F. W., 5583
 Schnieders, H. H., 915
 Schön, W. J., 870
 Schönbach, H., 7011
 Schooler, A. B., 609
 Schötz, F., 78
 Schraa, R. J., 2111, 3856
 Schrader, L. E., 500
 Schreiner, E. J., 1406–38, 5047
 Schreiter, J., 1198, 2699
 Schröck, O., 5097
 Schroeder, C. A., 6884
 Schroeder, D. B., 4200
 Schroeder, H. E., 796
 Schroeder, H. W., 744
 Schroeder, J., 286
 Schröter, W., 1097
 Schubert, E., 4893, 6789
 Schüller, H., 3629
 Schultz, E. S., 2674
 Schultz, G., 4509
 Schulz-Schaeffer, J., 2604
 Schumacher, R., 2962
 Schumann, G., 5428
 Schuphan, W., 3619, 5461
 Schuster, M. L., 3386, 5226, 5271
 Schuster, W., 1199, 1207
 Schütt, P., 1428, 1435
 Schutz, W. M., 1663, 7164
 Schwaier, R., 3445, 5333, 7215
 Schwammenhöferová-Stránská, K.,
 6703
 Schwanke, R. K., 4182
 Schwartz, D., 2370, 3733, 4103
 Schwartz, C. D., 6800
 Schwarze, P., 3989
 Schwenke, W., 1420
 Schwendiman, J., 2756
 Schweppenhauser, M. A., 6649, 6651–2
 Schwinghamer, E. A., 5567
 Sciaroni, R. H., 2013
 Scifres, C. J., 4665
 Scora, R. W., 3063
 Scossiroli, R. E., 100, 2184
 Scott, D. H., 3110
 Scott, F. H., 7095
 Scott, G. E., 2388–9
 Scott, W. O., 3393
 Seale, C. C., 1051
 Seaney, R., 878
 Sears, E. R., 439, 2213, 4016
 Sears, J. H., 557
 Šebesta, J., 6073
 Sebok, C., 7134
 Sedlmayr, K., 4713
 Seetharaman, R., 2482, 6329, 6355
 Seget'a, V., 5184
 Sehgal, S. M., 4099
 Šehovceva, N. B., 5874
 Seif, R. D., 2172
 Seitz, F. W., 3216, 6965
 Sejsebaev, A. T., 6188
 Sekiguchi, F., 4303
 Sekijo, T., 4422, 4426
 Sekitsuka, S., 4735
 Sekizuka, S., 6463
 Seleznev, N. N., 3944
 Selim, A. K. A., 391
 Selivanova, T. N., 5727
 Seljahudin, A., 4874
 Sels, J., 1558
 Semenčuk, P. S., 3315
 Semenko, M. I., 4046
 Semenko, N. I., 5639
 Semenova, D. N., 2333
 Semenova, K. P., 5858
 Semenova, N. Ju., 488
 Semenova, S. D., 5024
 Semihatova, N. B., 6017
 Semin, V. S., 5743
 Sen, N. K., 7157
 Sen, S. K., 1809
 Sen, S. P., 84, 1700
 Senanayake, Y. D. A., 1354, 4995
 6899, 6902
 Senčenko, G. I., 1032, 2799
 Sene, D., 2133
 Senewiratne, S. T., 5360
 Sengupta, S. P., 771
 Senger, F., 78
 Šentov, R., 2469
 Šepel', N. A., 4267
 Šepelev, V. M., 2048
 Šepel'skij, A. I., 4885
 Šerban, M., 3546
 Šerbănescu, E., 3811
 Serdjuk, N. A., 5851
 Serebro, G. Ja., 1275
 Serebrovskij, A. S., 1772
 Seregina, L. M., 5338
 Šerengovij, P., 3105
 Sergeev, A. V., 6258
 Sergeev, L. M., 4879
 Sergeeva, K. D., 5920
 Sermjažko, I. A., 5432
 Serpuhovitina, K. A., 3157
 Serra, J. A., 1738
 Serry, M., 1204
 Servazzi, O., 3064
 Šestakov, V. E., 357
 Šestakova, A., 5653
 Šestopalova, N. G., 6631, 6640
 Ševčenko, I. S., 5849
 Ševčenko, V., 5740
 Ševčenko, V. K., 6632
 Ševčenko, V. N., 5792, 5798–801
 Ševčenko, V. T., 3934
 Ševchenko, *see* Ševčenko
 Ševcov, I. A., 4722, 6633
 Ševčuk, T. N., 3839
 Ševulescu, *see* Săvulescu
 Sevost'janov, S. P., 1074, 1111
 Sevov, A., 501, 511, 6185
 Sewa Singh, 6406
 Seyffert, W., 3549
 Sficas, A. G., 6664
 Sgaier, K., 830
 Sgarbieri, V. C., 1290
 Shaalan, M. I., 450
 Shafer, S. L., 326
 Shafik, I., 6076
 Shah, B. H., 6052

- Shah, S. S., 4239, 4703
 Shaikh, A. A., 1938
 Shaikh, A. Q., 6588
 Shain, *see* Šain
 Shakado, K., 4342
 Sharma, B., 3478
 Shama Rao, H. K., 1857
 Shambulingappa, K. G., 6686
 Shamina, *see* Šamina
 Shands, H. L., 477, 2277-8, 4067
 Shane, J. F., 1641, 3788, 7162
 Šangin-Berezovsky, *see* Šangin-Berezovskij
 Shank, D. B., 2319
 Shanks, R., 1606
 Shanmugasundaram, A., 801, 4026
 Shanmugasundaram, E. R. B., 2788
 Shapiro, N., 1571
 Shapiro, N. J., *see* Šapiro, N. I.
 Shargal, M., 6705
 Sharif, K. M., 1940
 Sharma, A. K., 174, 182, 5417
 Sharma, B., 1682, 2056, 7184
 Sharma, D., 443, 680, 6316
 Sharma, D. K., 6864
 Sharma, G., 2850
 Sharma, R. P., 170
 Sharma, S. D., 733, 6352
 Sharma, S. K., 652
 Sharma, Y. P., 560
 Sharoubeem, H. H., 6581
 Sharrock, J. N., 3902
 Shastry, S. V. S., 733, 1853, 2481, 6344, 6352
 Shaw, C. S., 4625
 Shawa, A. Y., 6908
 Shay, J. R., 2996
 Šcherbakov, *see* Ščerbakov
 Šhebeski, L. H., 2175, 3924
 Shechter, Y., 4447
 Shee, B.-W., *see* Shih, P.-H.
 Sheets, L. W., 4664
 Shellenberger, J. A., 2232
 Shen, C., 1001
 Shen, I.-S., 6605
 Shen, T.-T., 710
 Shentov, *see* Šentov
 Šepelev, *see* Šepelev
 Shepherd, R. J., 2392
 Shepherd, R. L., 860
 Sheridan, W. F., 3601
 Sherman, F., 3508
 Sherman, W. B., 6896-7, 6904
 Sherwood, E. R., 7232
 Sherwood, R. T., 4472
 Ševtsov, *see* Ševcov
 Shibasaki, O., 7093
 Shibuya, T., 4321
 Shields Gowans, C., 1765
 Shiffriss, O., 30
 Shigemura, C., 6338
 Shih, P.-H., 6299
 Shikata, M., 5375, 5378, 5398
 Shilling, P. R., 1585
 Shimada, H., 5225
 Shimamoto, Y., 3731
 Shimano, I., 4525
 Shimizu, M., 4322, 5148
 Shimoda, C., 7222
 Shimotsuma, M., 7079, 7091
 Shimoyama, H., 393, 6240, 6261
 Shimura, S., 4764
 Shinmyo, A., 1721
 Shioda, I., 5089
 Shirshov, *see* Širšov
 Shishkina, *see* Šiškina
 Shkutina *see* Škutina
 Shkvarnikov, *see* Škvarnikov
 Shmelyova, *see* Šmeleva
 Shmilliár, E., 1081
 Sholdt, L. L., 6875
 Shopova, M., 2909-10
 Short, K. C., 4930
 Shu, Y.-P., 4329
 Shulyndin, *see* Šulyndin
 Shumway, L. K., 2344, 4149, 6123
 Shurtleff, M. C., 1194
 Shvedskaya, *see* Švedskaja
 Shyam Prakash, 5140
 Shyu, I. S., *see* Hsu, Y.-S.
 Sibbitt, L. D., 2202-3, 3984
 Sičkar', N. M., 2138, 4241
 Šiclován, V., 6031
 Siddig, M. A., 961, 2730
 Siddiqui, K. M., 1445
 Sidenko, I. E., 5671
 Šidenko, I. H., 4889
 Sidorov, A. I., 6963
 Sidorov, A. N., 604
 Sidorov, B. N., 136, 172, 247
 Sidorova, K. K., 2058, 3469
 Siebeneick, H., 7239
 Siegel, A., 1789
 Sigafus, R. E., 1641
 Siharulidze, M. A., 2176, 5642
 Siirra, A., 4987
 Sikder, H. P., 4029
 Sikka, L. C., 6502
 Sikka, S. M., 2757, 4663
 Sikorova, K. K., 1678
 Sikut', V. A., 4673
 Silbaugh, B. A., 1990-1
 Silen, R. R., 1489, 6955
 Sill, W. H. (Jun.), 450
 Silli, E., 4932
 Sillió, F., 123, 173-5
 Silsbury, J., *see* Silsbury, J. H.
 Silsbury, J. H., 786, 2101
 Silva, A. T. M., 206
 Silva P., J. V., 4446
 Silván, A., 1101
 Silveira, A. P. da, 5232, 6582, 7121
 Silveira, S. G. P., 6582
 Silvestri, G., 1557
 Simak, M., 1466
 Simandle, P. A., 7115
 Šimanovskaja, E., 1577
 Simarov, B. V., 77
 Šimenov, A., 5214
 Simidčiev, T., 4926
 Simidtschiev, *see* Simidčiev
 Simlote, K. M., 4618, 4640
 Simon, U., 747
 Simonguljan, N. G., 1000, 4666-7
 Simongulan, *see* Simonguljan
 Simmonds, N. W., 36, 2686
 Šimonjan, E. C., *see* Šimonyan, E. K.
 Šimonov, A. A., 5191
 Simons, M. D., 4074, 6089, 6106
 Šimonyan, E. K., 3175
 Simpson, G. G., 3458
 Simpson, W. R., 5119
 Sims, H. J., 371
 Sims, J. L., 2525, 6357
 Šimura, *see* Shimura
 Sinča, K., 1546
 Singer, M. F., 56
 Singh, A. P., 800, 2596, 4438
 Singh, B., 1286
 Singh, D. N., 793, 2596, 4414, 5249, 6401
 Singh, G., 2520, 6162
 Singh, G. R., 6616
 Singh, H. G., 2768, 4638
 Singh, J. P., 692, 1580
 Singh, K. B., 6513
 Singh, K. K., 3099
 Singh, K. P., 7213
 Singh, M., 1796, 4649
 Singh, M. P., 363, 2262, 3960
 Singh, R. B., 5159
 Singh, R. K., 2849-50
 Singh, R. M., 6099, 6100-101
 Singh, R. N., 1294, 6864
 Singh, S., 6250
 Singh, S. D., 408
 Singh, S. N., 4917
 Singh, S. P., 363, 385, 560, 636, 1033, 1205, 1696, 3970, 4237, 6748, 7220
 Singh, T. P., 4189
 Singh, U., 5249
 Singh Bhorjee, J., 5301
 Single, W. V., 2248
 Singletary, C. C., 4905
 Singleton, W. R., 31
 Sinha, B. K., 7126
 Sinha, S. K., 16
 Sinotó, Y., 7129
 Sinskaja, E. N., 3833
 Šipovskij, A., 2181
 Siraj-ud-Din Khan, M., 1934
 Sirajud-Din Shah, 7130
 Sircar, S. M., 736
 Širko, V. N., 5711
 Širohi, S. S., 7066
 Širšov, V. A., 2061
 Sisakjan, I. Š., *see* Sisakyan, I. Sh.
 Sisakyan, I. Sh., 6083
 Šiškina, T. A., 7211
 Sisler, W. W., 6235
 Sisodia, K. P., *see* Sisodia, K. P. S.
 Sisodia, K. P. S., 2449, 6404
 Sitte, P., 1741
 Sivagnanam, L., 4272
 Siva Rao, D. U., 6618-9
 Sjödin, J., 124, 4513
 Šjubarov, A. E., 4901
 Škardun, D. S., 6286
 Škarnikov, P. K., 109
 Skiebe, K., 1098, 3615, 3633
 Skljár, V. N., 4092
 Škodenko, V. I., 5668, 5670
 Skold, L. N., 662
 Skoog, H. A., 2869, 2877
 Skorda, E., 301
 Skorda, E. A., 374, 6075
 Skoškiewicz, K., 3976
 Skrebцова, N. D., 5145
 Skripnikov, Ju. G., 7082
 Skriver, K., 196
 Skula, K., 6653
 Škutina, F. M., 348, 5988
 Škvarnikov, P. K., 101, 121, 122, 238, 2041, 3521
 Skvorcov, A. K., 5087
 Skvorcov, S. N., 5940
 Slaats, A., 6659
 Slaboński, A., 3484
 Sládek, B., 4715
 Slate, G. L., 4871, 6901
 Slavgorodskaja, L. P., 2048
 Slavgorodskaja, *see* Slavgorodskaja
 Sleesman, J. P., 892
 Slepneva, A. S., 1281
 Slijkerman, C., 5185
 Slinin, A. A., 6584

- Slinn, H. A., 4500
 Slonimski, P. P., 1722, 7223
 Šlotová, J., 3491, 3603
 Slovenčíková, V., 6080
 Slušanschi, H., 420
 Sluyters, J. A. F. M., 2524
 Smale, B. C., 3011
 Smalley, E. B., 1423
 Šmarac, G. E., 555, 3246, 4180
 Smartt, J., 1307
 Šmeleva, J. F., 121–2
 Smeltzer, D. G., 684, 1632
 Smid, T., 7085
 Smiley, J. H., 2883
 Smirnov, V. G., 6112
 Smirnova, L. A., 5880
 Smith, B. R., 1776
 Smith, B. W., 1474
 Smith, C. E., 1448
 Smith, C. H., 2864
 Smith, D., 4475
 Smith, D. C., 4353, 4381
 Smith, D. H., 456
 Smith, D. W. E., 140
 Smith, G. L., 1299
 Smith, G. S., 2268
 Smith, H. H., 539, 548, 1804, 2218, 3471, 3497, 3506
 Smith, H. L., 4964
 Smith, J. C., 4970
 Smith, J. D., 1822, 2921, 3346, 6313
 Smith, L. H., 2432
 Smith, P. E., 1645
 Smith, P. G., 6730
 Smith, P. R., 6436
 Smith, R. H., 1416, 1426
 Smith, R. L., 1301
 Smithson, J. B., 1871, 968, 2739
 Smittle, D., 3313
 Smolarz, K., 3115–7
 Smol'janinova, N. K., 2946
 Smol'skaja, A. V., 564
 Smrž, J., 4740
 Smykov, V. K., 1245, 5565, 5756, 5778, 5783
 Sneed, E. M., 3988
 Sneep, J., 37
 Šnejder, Ju., *see* Šnejder, Ju. I.
 Šnejder, Ju. I., 5709
 Snhčjan, G. L., *see* Snkhchyan, K. L.
 Snkhchyan, K. L., 3171
 Snoad, B., 3411
 Snope, A. J., 6172
 Sobaran Singh, 4013
 Sobczykiewicz, D., 3115
 Soczek, Z., 2983
 Soebiapradja, R., 6573
 Soegaard, *see* Søegaard
 Søegaard, B., 1400, 1406
 Soemarjadi, 6768
 Soghomonyan, S. A., 397
 Sogomonjan, *see* Soghomonyan
 Soidla, *see* Sojdl
 Sojdl, T. R., 7, 77, 3442, 7218
 Sojfer, V. N., 3584
 Sokal, R. R., 3618
 Sokolov, A. M., 5773, 5775, 5922
 Sokolov, B. P., 4187
 Sokolov, N. N., 172, 247
 Sokolova, E. P., 4884
 Sokolova, I. E., 1522
 Sokolova, N. A., 488
 Sokolova, V. E., 5625
 Solanes, V. G. de, 2397
 Solanki, S. S., 566
 Solari, R. M., 3890
 Solberg, P., 4389
 Solel, Z., 5318
 Solignat, G., 3076
 Solomatin, D. A., 5857, 5882
 Solomko, E. A., 2074
 Solomon, S., 3562
 Solotarev-Neky, E., 5939
 Solovej, G. S., 5921
 Solovej, G. T., 5748
 Solov'eva, V. M., 1146
 Somayajulu, B. A. R., 1220
 Somorowska, K., 6514
 Son, *see* Sung
 Sonneborn, T. M., 3540
 Sonvico, V., 3452
 Soo, T.-P., 1055
 Soost, R. K., 1289, 3057
 Šopina, V. V., 5637–8
 Sora, S., 3443
 Soressi, G. P., 5128
 Soria V., J., 1171, 2019–21, 2896, 2898, 4780, 6718
 Soriano, J. D., 2509, 2528
 Sorokina, L. G., 5822
 Sosnihina, S. P., 6112
 Sosnikhina, *see* Sosnihina
 Sosnová, V., 4909
 Sosulksi, F. W., 2234
 Sosunova, Z. L., 4123
 Sotomayor-Rios, A., 690
 Soundararajan, T. G., 4312, 6325
 Sousa, I. O. M. da C. e., 5029
 Southards, C. J., 4757
 Souza, D. M. de, 6340
 Sovrmenyan, K. H., 5965
 Sowell, G. (Jun.), 1634, 3308
 Soydl, *see* Sojdl
 Soyfer, *see* Sojfer
 Sozinov, A. A., 3697, 3987
 Spada, C., 716
 Sparrman, B., 4221
 Sparrow, A. H., 3501, 3595
 Spasojević, V., 2377
 Spaulding, D. W., 6702
 Spears, C. L., 59
 Spector, C., 3434
 Špehar, V., 316
 Spence, J. R., 968, 2729, 2739
 Spennemann, F., 639
 Sperling, D. W., 2323, 6138
 Spiegelman, S., 73
 Spierings, F., 6790
 Špilev, L. E., 5675, 5732
 Spina, P., 4974
 Spirin, M. E., 6947
 Spirov, N., 1383
 Spirova, M., 634, 1208
 Spirowa, *see* Spirova
 Spitaleri, A., 1381, 3192
 Spivey, C. D., 1520
 Sprague, G. F., 4184, 4196
 Springer, F., 3621
 Squillace, A. E., 6994
 Squire, A. M., 4413
 Sraon, H. S., 6298
 Srb, A. M., 66
 Sridharan, C. S., 3081
 Srinivasalu, N., 6741
 Srinivasan, K., 2827
 Srinivasan, K. V., 4705, 6616
 Srinivasan, V., 2504, 2522, 4312, 6325
 Srinivasan, V. K., 6304
 Srivastava, D. P., 4965, 6872
 Srivastava, H. C., 4947
 Srivastava, J. P., 4031
 Srivastava, L. M., 5425
 Srivastava, P. S. L., 4013, 6250
 Srivastava, R. N. P., 2849
 Stadornov, O. I., 5916–7, 5923
 Staehly, C. A., 5412
 Staff, I. A., 1764
 Stafford, T. J., 2834
 Stahmann, M. A., 2728, 4036, 6540
 Staicu, I., 5521
 Staikow, *see* Stajkov
 Stairs, G. R., 5050
 Stajkov, G., 526, 917, 1212
 Stallen, R. van, 1073, 6624
 Stam, Ja. M., 5869
 Stamboliev, M., 1583
 Stammer, H., 2985, 3112
 Stanačev, S., 6635
 Stănescu, Z., 1099, 6638
 Stanev, P., 4133
 Staneva, B., 622
 Stanford, E. H., 839, 4483
 Stanislavskaja, N. G., 6939
 Stanková, J., 4236
 Stannard, M. C., 3052
 Stansel, J. W., 711, 6353
 Stanton, C. R., 2813
 Stanton, W. R., 588
 Stapanov, A. I., 6057
 Stapel, C., 6449
 Starčenkova, M. V., 4245–6
 Starling, T. M., 625, 4253
 Stasjavičius, Z. B., 5708
 Staszewski, Z., 858, 4518
 Staszkwicz, J., 7006
 Staten, G., 980
 Stavely, J. R., 856, 4516, 6450
 Stažickij, *see* Stazicky
 Stazicky, S., 4506
 Stchapova, *see* Ščapova
 Stebbins, G. L., 151–2, 2403, 4239
 Stebbins, R. L., 1300
 Stecenko, V., 4563
 Steele, T. E., 2793
 Steenackeos, V., 1449
 Ștefan, I., 2243
 Ștefan, N., 2956
 Ștefănescu, A., 2152
 Ștefanov, D., 1154
 Ștefanov, T., 606, 2430
 Ștefansson, B. R., 4792, 5293
 Stegajlo, T. A., 5304
 Stegemann, H., 2702
 Steinbauer, C. E., 948
 Steinbeck, K., 1472
 Steinegger, D. H., 6399
 Steinitz-Sears, L. M., 2215
 Steinswat, W., 5280
 Stelter, H., 4592–3
 Stenseth C., 3106
 Stepanenko, D. P., 2955
 Stepanov, K. I., 4146
 Stepanov, K. M., 5854
 Stepanova, T. V., 5832
 Stephen, W. P., 1266
 Stephens, J. C., 667
 Stephens, S. G., 1007
 Steppler, H. A., 2635
 Šterenber, P. M., 5035
 Stern, C., 7232
 Stern, H., 155, 1781
 Stern, K., 1394, 1460, 5062
 Settler, R. F., 6955
 Stevens, H., 627
 Stevens, T. J., 1723

- Stevensón, D. R. G., 3013
 Stevenson, F. J., 2681
 Stewart, D. M., 2265, 5686
 Stewart, J. W., 3508
 Stewart, T. A., 2576, 2613
 Stewart, D. K. R., 6809
 Stewart, I. J. V., 2846
 Stilinovic, A., 6442
 Stिंग, N., 324
 Stith, L. S., 2750
 Stivers, R. K., 5953
 Stjuart, *see* Stewart
 Stob, M., 6424
 Stockij, V. N., 6574
 Stockopf, N. C., 3886
 Stoev, K., 1382
 Stoiciu, T., 6041
 Stoilov, *see* Stojlov
 Stojanov, G., 5272
 Stojanova, J., 6754
 Stojanova, *see* Stojanova
 Stojlov, M., 556, 2129
 Stojuškin, I. A., 3181
 Stokes, G. W., 1150-1, 2883, 3789-91, 3793
 Stokes, I. E., 2821
 Stoletov, V. N., 3511
 Stoll, K., 2959
 Stolle, G., 4856
 Stonecypher, R. W., 1431
 Stonehill, E. H., 5374, 5382
 Stoner, A. K., 1582, 5195, 7100
 Storer, K. R., 1983
 Storey, H. H., 5533
 Storey, W. B., 5411
 Storoženko, E. M., 5758
 Storoženko, Ju. G., 5698
 Storožuk, E. M., 1392
 Stoskopf, N. C., 2142, 2155
 Stösser, R., 4927
 Stoy, V., 3997
 Stojanov, *see* Stojanov
 Strahov, T. D., 5608
 Strain, B. R., 5071
 Strampelli, N., 328, 2161-2
 Strand, E., 5941
 Strandberg, J. O., 7041
 Straten, E. F., 3335
 Straumal, B. P., 1026, 4616, 5817
 Strebeyko, P., 3976
 Street, F. T., 6833
 Streeter, J. G., 643
 Streetman, L. J., 2588
 Strel'cova, T. A., 4122
 Strel'čuk, S. I., 6177
 Streljchuk, *see* Strel'čuk
 Strel'skaja, O. Ja., 5712
 Strickland, M. A., 1009
 Strickland, R. W., 5561, 5579
 Stringfellow, A. C., 2470
 Stringham, G. R., 4486
 Strnadová, K., 7212
 Stroilä, C., 3546
 Stroube, W. H., 2566
 Struble, F. B., 4614
 Strydom, E., 3255
 Stuart, A., 57
 Stubbe, G., *see* Stubbe, H.
 Stubbe, H., 3812, 5354
 Stubbs, R. W., 289, 321
 Stuber, C. W., 2348, 3577, 4151
 Stucker, R. E., 1306
 Studenceva, L. I., 4326
 Sturtevant, A. H., 3527
 Stuthman, D. D., 6424
 Styles, E. D., 2312, 2352, 6129-30
 Suarez P., O., 1639
 Subhash Kumari, 4822
 Subhashini, L., 4748
 Subir Sen, 1044
 Subrahmanyam, M., 1132
 Subramaniam, M. K., 3424
 Subramanyam, K. N., 873
 Subramanyam, M. D., 728
 Suchtelen, N. J. van, 2700
 Sugahara, Y., 5225, 5229
 Sugano, S., 3274
 Sugimura, T., 3449
 Sugiyama, N., 4764
 Sugiyama, S., 5296-7
 Suhanova, R., 900
 Suhodolec, V. V., 6
 Suhorukov, K. T., 1022, 5847
 Sujatinov, I. A., 3150
 Sujkova, L. A., 4216
 Sukhdev Singh, 2840, 6626
 Šul'ga, N. N., 5700
 Šul'ga, P. M., 813, 1892
 Sulinowski, S., 2582-3, 6396
 Sullivan, D. T., 3146
 Sultan Ahmad Khan, 1934
 Sultanov, S., 6569
 Šulyndin, A. F., 3593, 4040, 5648
 Sumi, T., 3172
 Sumkin, I. D., 3095
 Summers, T. E., 1051-2
 Sumpf, D., 6630
 Šumsij, A. D., 3159
 Sun, I.-M., 2752
 Sund, J. M., 761
 Sundaram, N. V., 692, 4654
 Sunderman, D. W., 3955
 Suneson, C. A., 655, 1998, 2407
 Sung, S.-F., 1549
 Supetran, N. C., 1067
 Surendran, C., 4436
 Surmenjan, *see* Sovrmenyan
 Sushil Kumar, 141
 Šutić, D., 3026, 6731
 Sutka, J., 1802, 6156, 6159
 Šutova, Z. P., 4417
 Sutton, H. C., 134
 Suykova, *see* Sujkova
 Suzdal'skaja, M. V., 5862
 Suzuki, H., 5180
 Suzuki, I., 5225, 5229
 Suzuki, M., 5958
 Suzuki, T., 4342
 Sváb, J., 1107, 5502
 Swaminathan, M. S., 5998-9
 Švarc, S. S., 80
 Švedskaja, Z. M., 1522
 Sweeney, J. P., 7115
 Svenson, G., 3923
 Svensson, G., 278
 Svetljakova, R. I., 1392
 Svirskij, Ja. N., 3376
 Swami, U. B. S., 464
 Swaminathan, M. S., 362, 873, 1832, 2193, 2508, 2511, 3610, 3946
 Swanson, C. P., 65
 Sweet, G. B., 1470-71
 Świetlińska, Z., 125, 7056
 Swink, J., 2158
 Syakudo, *see* Shakado
 Sybanbekov, K. Ž., 2227, 3979
 Sybenga, J., 1047, 1815-6, 3614, 3645, 5440
 Sychkov, *see* Syčkov
 Syčkov, M. A., 3278
 Sydow, B. v., 449
 Syed Zaheeruddin, 1921
 Syme, J. R., 432
 Syrach Larsen, C., 5074
 Szende, K., 3561
 Szentiványi, P., 3072
 Szerafin, J., 5503
 Szigat, G., 876
 Sziklai, O., *see* Sziklai, O. S.
 Sziklai, O. S., 1492, 3239
 Szilágyi, K., 4993
 Szota, Z., 1100
 Sztejnberg, A., 311
 Szűcs, A., 5254
 Szwadiak, J., 3332
 TABATA, M., 2281
 Tabuenca, M. C., 4873
 Tacconi, R., 1361
 Tadami, 11
 Tafradžijski, *see* Tafradžijski
 Tafradžijski, I., 2993
 Tafuri, F., 2378, 4139
 Tagumpay, O., 4297
 Tahir, W. M., 2303
 Tai, C.-C., 5287
 Tai, G. C. C., *see* Tai, C.-C.
 Tai, M., 2885
 Tai, W., 811
 Taira, T., 4752
 Takahashi, A., 3352
 Takahashi, H., 6303
 Takahashi, R., 6241-2, 6244, 6263, 6266, 6283
 Takahashi, T., 1717, 1721, 1729
 Takahashi, Y., 6303
 Takai, R., 3120
 Takakuwa, M., 5929
 Takamori, Y., 5342
 Takayama, A., 4743
 Takayama, Y., 5098
 Takegami, S., 4018-21, 6061
 Takenaka, Y., 3721, 3728-9
 Takeoka, Y., 4322
 Tal, M., 3337, 7104
 Talambä, D., 4582
 Taliaferro, C. M., 659, 767, 2599, 3761, 6301
 Tamás, P., 2950, 4852
 Tamaši, *see* Tamássy
 Tamássy, I., 3016, 6012
 Tamimi, S. A., 6417
 Tan, C. F., 5284
 Tan, Y.-H., 1709
 Tanaka, A., 4320
 Tanaka, J. S., 7124
 Tanaka, S., 4303
 Tănăsescu, E., 918
 Tandon, J. P., 6265
 Tandon, S. L., 3357, 5135
 Taner, E., 6663
 Tang, T.-W., 1656
 Tang, W.-T., 5287
 Tanifuji, S., 3611-13
 Taniguchi, S., 6327, 6334, 6351
 Tanveer Ahmad Javaid, 1905
 Tapay, J. T., 1062, 1067
 Tarabe, K., 4342
 Tarabrin, G. A., 5882
 Tarakanov, S. G., 2939
 Taranova, E. A., 4881
 Taranova, Y., *see* Taranova, E. A.
 Tarasenko, N. D., 903, 5319
 Tarasov, V. M., 6815
 Țârdea, C., 1377

- Tariguchi, S., 2034
 Tarjot, M., 6720
 Tarkowski, Cz., 1756–7, 3937
 Tarnavski, I. T., 1473
 Tarumoto, I., 2593
 Tarusov, B. N., 425
 Tarutina, L. A., 2337
 Tašina, I. M., 5895
 Tatarincev, A. S., 3587
 Tatarišvili, A. N., 3056
 Tateo, K., 4297
 Tavčar, A., 102, 2099
 Taylor B., A. S., 1623
 Taylor, J. C., 1561, 3773, 5281, 7155
 Taylor, J. H., 5394
 Taylor, J. P., 3282, 7040
 Taylor, N. L., 4395, 4515
 Taylor, R. H., 6436
 Taylor, R. L., 775, 3459
 Tayyab, M. A., 4276, 6314
 Tazán, C., L., 6911–12
 Tchapova, *see* Ščapova
 Tedin, O., 5590
 Tegvey, L., 3910
 Teich, A. H., 4160, 7001
 Teittinen, P., 459
 Telkiew, G., 507, 4113, 4127
 Tempé, J., 620
 Templeton, G. E., 2525
 Tenerini, I., 4976
 Teng, Y.-Z., 696
 Teodoradze, S. G., 2055
 Teodorescu, Ș., 3187
 Tepora, J. N., 6367
 Terada, T., 3352
 Teramura, T., 6102
 Ter-Avanesjan, D. V., 993, 3838
 Ter-Avanesyan, *see* Ter-Avanesjan
 Terent'eva, A. I., 5808
 Tereščenko, N. M., 2059
 Tereshkovich, G., 1494, 1531, 3312
 Teretchenko, *see* Tereščenko
 Ter-Karapetjan, *see* Der-Karabedian
 Ternovskij, M. F., 3519, 5802, 5806–8, 5813–4, 6654–5
 Terpó, A., 3616
 Terra, G. J. A., 7241
 Terrell, E. E., 780
 Terrill, T. R., 1129
 Tertecel, M., 4894
 Tesar, M. B., 833
 Tesi, R., 3298, 7065
 Tešić, T., 653
 Tetteh, A., 2121
 Tewari, R. N., 1580
 Tewari, V. P., 7202
 Thakur, C., 6607
 Thakur, D. R., 1294
 Thakur, M., 2849
 Thakur, M. R., 1053, 4687–8
 Thakur, R., 2529
 Thangam, N. S., 4272
 Theis, Th., 6594
 Thijn, G. A., 932
 Thirumala Rao, S. D., 1220
 Thobel, V. V., 694
 Thøgersen, O., 197
 Thomas, B. V., 2565
 Thomas, C. A., 2934
 Thomas, E., 1740
 Thomas, G. W., 4908
 Thomas, H., 464, 1870, 2282, 2284, 6091, 6098
 Thomas, H. L., 850
 Thomas, J. R., 6394
 Thomas, M. O., 3384
 Thomas, P. T., 1870, 1879, 2581
 Thomas, W. I., 579–80, 2322, 3628, 4105, 6126
 Thomas, W. O., 5240
 Thombre, M. V., 1839
 Thompson, A. E., 5195, 7100, 7105
 Thompson, B. E., 1320, 1328
 Thompson, D. L., 591
 Thompson, F. C., 1183
 Thompson, J. C., 6128
 Thompson, K. F., 3282, 5485, 7040
 Thompson, M. M., 1246
 Thompson, R. K., 465, 4052
 Thomson, N. J., 1016
 Thomson, R., 2124
 Thor, E., 1478
 Thorn, W. A., 6883
 Thorpe, H. C., 3871, 3876
 Threlfall, R. J., 758
 Thulin, I. J., 1470
 Thuljaram Rao, J., 4705, 6603
 Thullen, M., 4296
 Thung, S. B., 1603
 Thurling, N., 1144
 Thurman, C. W., 802, 4480
 Thurman, R. L., 266, 2462
 Thurston, H. D., 937
 Tiemann, H., 6452
 Tigerstedt, P. M. A., 3221
 Tihonovskij, A. V., 2971
 Timofeeva-Resovskaja, E. A., 1761
 Timofeev-Resovskij, N. V., 2036
 Timov, A., 1584
 Tindale, M. D., 4818
 Ting, Y. C., 3509
 Tinline, R. D., 2257
 Tippet, R. L., 2853
 Tipton, C. L., 2388
 Tirumala Char, D. K., 6728
 Tiščenko, A. V., 4733
 Titarenko, L. O., 3326, 5193
 Tiťu, H., 6110
 Titz, W., 2559
 Tiwari, K. P., 385
 Tiwari, R. D., 5235
 Tiwari, V. P., 2913
 Tjugina, K. I., 6486
 Tjurin, Ju., *see* Tjurin, Ju. S.
 Tjurin, Ju. S., 6461–2
 Tkačenko, F. A., 3245
 Tkačenko, I. D., 3696
 Tkačenko, N. N., 2396
 Tkalič, P. P., 5840
 Toda, R., 5104
 Toda, S., 4115–6, 4198
 Todaka, S., 5225, 5229
 Todd, G. W., 428
 Todd, J. C., 1343
 Todd, T., 6878
 Todorov, H., 1382
 Todorov, J., 7175
 Todorov, Y., *see* Todorov, J.
 Tóffano, W. B., 4706, 6582
 Tohyama, *see* Toyama
 Tokin, B. P., 5842
 Tokumasu, S., 1519
 Tollenaar, H., 6078
 Tollervay, F. E., 971, 2736, 2738
 Tolmačev, A. I., 150
 Tolmatchev, *see* Tolmačev
 Tomar, P. S., 2848, 6260
 Tomarjova, V. A., 4375
 Tomassini, C., 540
 Tomaszewski, Z., 812
 Tomcsányi, P., 5501
 Tomes, M. L., 3329, 7097–9
 Tomita, K., 3732
 Tomo, N., 6710
 Tomoroga, P., 512
 Tomov, N., 507, 4113, 4127
 Ton, L. D., 6852
 Tonegawa, S., 75
 Topalov, V., 7203
 Topčijski, S., 3100, 4999
 Topham, P. B., 5367, 6888
 Toptschijski, *see* Topčijski
 Torgovkina, E. E., 4552
 Torikata, H., 4956
 Toriyama, K., 2578, 4331
 Torje, D., 7019, 7177
 Toro M., J. C., 583
 Torop, A. A., 484, 4090
 Torosjan, M. V., 1706
 Torregroza, M., 496
 Torres, J. P., 4938
 Torres, M., R., 1332
 Torrey, J. G., 7191
 Torrie, J. H., 3394
 Torroba, C. A., 3046, 3048
 Toržinskaja, L. P., 542
 Tošev, V., 5942
 Tosic, L., 6665
 Tourte, M., 3958
 Tourte, R., 1313
 Townley-Smith, T. F., 4423
 Townsend, C. E., 1983, 2644–5, 6457
 Toyama, T., 3231
 Toyao, T., 6709
 Toynbee-Clarke, G., 3367
 Tozu, T., 3939
 Trandafir, L., 930
 Traub, W., 65
 Tren, 6763
 Trentin, A., 2619, 6033
 Trifonov, D., 3028
 Trifunović, M., 3368
 Trifunović, V., 2363, 6201
 Tripathi, R. S., 700
 Trnka, M., 263
 Trofimec, L. N., 5706
 Trofimenko, N. I., 4267
 Trofimov, V. A., 4110
 Trofimovskaja, A. Ja., 241, 650, 4246
 Trofimovskaja, *see* Trofimovskaja
 Troickaja, E. A., 3961
 Troníčková, E., 5184
 Trošina, *see* Trošina
 Trošina, A. V., 2233
 Trubčankova, A. D., 434
 True, R. H., 7080
 Trujillo, P. M., 4481
 Tsai, C.-M., 1158
 Tsai, K.-H., 1674, 2501, 3720, 7168–9
 Tsalov, Y., *see* Calov, J.
 Tšanova, *see* Canova
 Tsarapkin, *see* Carapkin
 Tsay, J. M., *see* Tsai, C.-M.
 Tschawdaroff, G. A., *see* Čavdarov, G.
 Tscheschmedjew, *see* Češmedžiev
 Tseng, T.-C., 743
 Tsenov, *see* Cenov, A. S.
 Tsien, C. P., 1894
 Tsikov, *see* Cikov
 Tsikova, E. D., *see* Cikova, E.
 Tsitsin, *see* Cicin
 Tsou, P., 6531
 Tsuchiya, S., 4539–40, 4547–48
 Tsuchiya, T., 2419, 6244
 Tsudoda, K., 6347

Tsunewaki, K., 330-1, 2228, 3541,
3705, 3707-10, 3932, 5970, 5973-4
Tu, C.-C., 953
Tubertini, R., 6485
Tucović, A., 6971, 6978
Tugarinov, V. V., 1698, 7205
Tulecke, W., 67
Tuleen, N., 32
Tumanov, I., 3846
Tung, M.-C., 1710
Turbin, 564, 2052, 2337
Turcotte, E. L., 982
Turcu, N., 1186
Turesson, G., 5138
Turkmenbaev, B. A., 1005
Turkov, V. D., 104, 2071
Turková, V., 1624, 7144
Tutt, C., *see* Tutt, C. R.
Tutt, C. R., 3788, 6140, 7162
Tuza, S., 5510
Tveritnev, F. G., 4903
Tymčenko, L. F., 5656
Tyrnov, V. S., 5585
Tysdal, H. M., 2821

UCHIMURA, S., 5121, 5179
Udačin, R. A., 3950
Udagawa, T., 5958
Ueda, N., 3172
Udo, S., 5322-4
Ugent, D., 902
Uhlík, J., 4909
Ujević, A., 6195
Ulinici, V., 2335
Uliński, G., 2425, 2434
Ul'janiščev, V. I., 5643
Uljanova, T. N., 4457
Ullivarri, R. F. de, 2835
Ulloa R., J., 5273
Ulström, K.-E., 3038
Ullstrup, A. J., 4192
Ulrich, V., 2632
Ul'rih, N. N., 3804
Umaerus, M., 904
Umarov, A. A., 919
Uncini, L., 3348
Underbrink, A. G., 5420
Upadhyay, M. D., 3936
Upadhyay, M. K., 6293
Upadhyaya, B. R., 2405
Upadhyaya, Y. M., 363, 4072
Upchurch, W., 2200
Urata, U., 805
Urban, Z., 2146
Urgel, G. V., 2836
Ursu, T., 4137
Urunov, I. S., 5824
Usakov, Ju., 4666
Usanova, Z. I., 5126
Usmanov, P. D., 171
Usov, A. G., 2968
Usseglio-Tomasset, L., 5342, 5348
Ustimenko, G. V., 5126
Ustimenko-Bakumovsky, A. V., 4721
Ustinova, E. I., 2928
Uzakov, Ju., 4667
Uzakov, Yu., *see* Usakov, Ju.
Uzhintseva, *see* Užinceva
Užinceva, L. P., 2058
Uzunovski, M., 6669

Vakhrusheva, *see* Vahruševa
Vakili, N. G., 5005, 5008
Válčanov, D., 4249
Válčanov, P., 6047
Valčev, P., 911, 4606
Valchanov, *see* Válčanov, P.
Valchev, *see* Valčev
Valčinkov, V., 508
Val'dman, *see* Valdmanis
Valdmanis, A., 1076
Valente, E. G., 4327
Válev, V., 1213
Valeva, S. A., 355
Vallega, J., 305, 312, 318
Van, T. K., 2526
Vandam, J. B., 3949
Vandemark, J. S., 1194
Vanden Born, W. H., 2111, 3856
VanDenburgh, S., 6443
Van der Ven, L. F. J. M., 6666
Vanin, I. I., 5763-4, 5767
Van't Hof, J., 3416
Varenica, E., 5301
Varfolomeeva, A. M., 2210
Varga, A., 6476
Varga, A. (Mrs.), 6476
Varga, P., 2610, 2653, 3362
Vargas, J. M., (Jun.), 6380
Vargas S., R., 1617
Varghese, G., 3061
Varis, E., 359, 423
Varisai Mohammad, S., 3081, 6741
Várk, E., 853
Varšaver, N. B., 4
Vartanjan, U. S., 5804
Vašahidze, L., 3142
Vasconcellos, J. de C. e., 4314
Vasconcelos, F. A. T., de, 1673
Vasilenko, I. I., 3898, 3948
Vasilev, A., 674
Vasil'ev, I., 3927
Vasilev, M., 6586
Vasil'ev, V. I., 1344
Vasil'eva, E., 4899
Vasin, V. B., 5253, 5623
Vasjakin, N., 7193
Vatutin, A., 5219
Vaughan, J. G., 7054
Vavilov, N. I., 3831, 3834, 3836, 5875
Vavilov, V. N., 5526
Vavilova, L. M., 2443, 3745
Vazquez, F. N., 4966
Veatch, C., 3888
Vecht, H., 321
Ved Brat, S., 3267
Vedeneva, V. S., 5872, 6919
Vedyševa, R. G., 5317, 5733
Veen, J. H., van der, 110, 3573, 5206
Veenbaas, A., 1600, 1687
Veeraraghavan, J., 742
Vega O., P. C., 6211
Vegner, G. P., 271
Veijola, T., 406
Velasco-Demeterio, E. G., 731
Veldeman, R., 6973
Veleminský, J., 3579
Velichko, B., 1383
Velickovic, D., 6867
Velikovský, V., 481
Venclavovič, F. S., 6756
Venegas, O., 854
Venkatachary, B., 2758
Venkataraman, K., 801
Venkataraman, M. R., 4703
Venkataratnam, L., 3069

Venkata Reddy, J., 6563
Venkatareddi, T. C., 6363
Venkataswamy, T., 6368
Venkateswarlu, J., 1746
Venketeswaran, S., 105, 2870
Venzano, A., 3899
Verano, L. M., 2528
Verderevskij, D. D., 5619, 5739, 5747,
5778, 5834-5, 5924
Veredčenko, B., 2426
Verhalen, L. M., 1018
Verma, G., 6740
Vermeire, H. A., 4206
Verona, P. L., 1145
Verughese, G., 2193
Verzilova, T. V., 5901
Veselovskij, I. A., 1566, 1568, 2682,
2684-5, 6505
Vesmin's, G. È., 5873
Vest, G., 1036
Vestergaard, E., 265
Vianney-Liaud, J., 4770
Vidaković, M., 5091, 6991
Vidal, A. J., 4293
Vidéki, I., 4829
Vidéki, L., 4829, 5223, 5234
Vidojković, R., 1268
Vidyadharan, K. K., 2868
Viera, C., 1618, 3371
Vigorov, L., 6808
Vijayalakshmi, U., 2828
Vijay Kumar, 6317
Vijendra Das, L. D., 4634
Villanueva N., R., 3912
Villareal, R. L., 585
Villegas, E., 2170
Vil'moren, *see* Vilmorin
Vilmorin, R. de, 6009
Vincent, G., 1476
Vinickaja, O. P., 1611
Vinitskaya, *see* Vinnickaja
Vinniakaja, V. S., 5753
Vinogradova, G., 5219
Vintu, O., 3431, 3455
Virbickene, S., 4519
Vishnu-Mittre, 6165, 6168
Vishveshwara, S., 6712
Višnevskij, A., 5187
Visnyovszky, Zs., 6892
Visser, T., 6802
Vitanov, M., 1548, 4921
Vive, K., 265
Vizer, K. J., 2229
Vizgalov, A., 6814
Vjark, *see* Várk
Vlach, M., 5964
Vladimirov, B., 1583-4, 5266, 7116
Vladimirov, N. S., 3826
Vladu, I., 3122
Vlasov, V. I., 1143, 5810
Vlasova, È. A., 5833
Vlk, J., 3814
Vnučkova, V. A., 5210
Vogel, F., 4804
Vogel, O. A., 424, 441, 1977, 1985
Voigt, H.-P., 3533
Voigt, P. W., 773
Voigt, R. L., 665, 4279
Voinea, M., 1529, 7019
Voinea, S., 2329-30, 2373
Vojcehovič, T. E., 2345
Vojtovič, K. A., 5743, 5746-7, 5756,
5765, 5783, 5835
Vol'f, V. G., 3809
Volodiu, V. G., 2049, 2052

VAHENOMM, K., 7103
Vahl, E. v., 4923
Vahruševa, È. I., 2327, 3520
Vakar, A. B., 405

- Vol'skij, V. G., 6132
 Vol'vač, P. V., 5770
 Volyneć, A. P., 1037
 Vorob'ev, V. F., 3919
 Vorob'eva, T. G., 4676
 Voronkevič, I. V., 5622
 Voronkova, A. A., 434, 6049
 Voronova, I. N., 7133
 Voronova, V., 4674
 Vose, H. H., 3313
 Voshchinin, P. A., 4375
 Voskresenskaja, Z. A., 6863
 Voss, G. K., 2835
 Votava, V., 4170
 Vovčenko, O. P., 3010
 Vožda, J., 4109, 6192
 Vrinceanu, V., 4807
 Vyas, B. P., 5966
 Vyskot, M., 7012-4
 Vysockij, K. A., 6533, 6557
 Vysokos, G. P., 392
 Vythilingam, M. K., 6711

 WADA, B., 3460
 Wada, J., 6347
 Wada, T., 2517, 2542
 Waggle, D. H., 3986
 Wahl, I., 300, 311
 Waite, A., 7054
 Walczak, W., 6534
 Waldman, M., 6433
 Wali Mohammad, 1929, 1932
 Walker, D. I. T., 2823
 Walker, D. R., 6834
 Walker, J. C., 1627
 Walker, J. L., 5391
 Walker, J. T., 2736
 Walkof, C., 5212, 5308
 Wall, J. R., 3510
 Wallace, A. T., 2130, 6099-6100
 Wallace, D. H., 3503, 5268, 7047
 Wallace, L. E., 2204, 2226
 Walls, D., 5429
 Walter, T. L., 267, 688, 2308, 2457, 2464
 Walters, R. J. K., 753
 Wan, H., 5286, 6675
 Wang, C. H., 2105
 Wang, C.-S., 1709
 Wang, C.-Z., *see* Wang, C.-S.
 Wang, H., 949
 Wang, M. K., 741
 Wang, S.-T., 1647
 Wang, T.-Y., 714
 Wang, W. C., 709
 Ward, A., 3983
 Ward, C. Y., 802, 4480
 Ward, O. G., 26
 Wareing, P. F., 1398
 Wark, D. C., 5576
 Wasano, K., 3726, 3730
 Washko, J. B., 4471
 Watada, A. E., 7146
 Watahara, K., 7050
 Watanabe, A., 6710
 Watanabe, K., 4525, 4954
 Watanabe, S., 2411
 Watanabe, T., 4690
 Watanabe, Y., 4316
 Watkins, R., 4080
 Watson, C. A., 413, 1999, 2222, 2238, 3990
 Watson, I. A., 448, 4030, 6067
 Watson, J. P., 4871
 Watson, J. S., 967-8, 2738

 Watson, W. A. F., 1820
 Watts, L. E., 1527
 Waud, J. L., 615
 Way, D. W., 6774
 Way, R. D., 6799
 Weaver, G. M., 3051, 3055
 Webb, B., 4711
 Webb, R. E., 3355, 7119
 Webb, S. J., 5391
 Webb, T. E., 2572
 Weber, C. R., 1649, 3406, 7163
 Weber, D. J., 2728, 6540
 Weber, E., 1465, 6992, 7233
 Weber, P., 7209
 Weber, R. P., 4370
 Webster, O. J., 2302, 2456, 2473-5, 4268, 4279
 Webster, R. K., 5930-1
 Wechmar, B. von, 431
 Weckel, K. G., 601
 Wedderburn, M., 6537
 Weerapat, P., 744
 Węgrzyn, S., 1758, 2089
 Wehrhahn, C. F., 5971
 Wehrhan, C., 5401
 Weibel, D. E., 678
 Weibel, R. O., 2172, 3393
 Weibull, G., 4843
 Weigart, M. G., 3569
 Weigle, J. L., 1188, 1511
 Weiling, F., 491, 616, 1551, 1697, 3473, 5366
 Weinberger, J. H., 3160
 Weinfurtnier, F., 6267
 Weinheimer, W. G., 4573
 Weisæth, G., 3674
 Weiss, M., 1463
 Welkie, G. W., 7156
 Wellesz, T., 4672
 Wellhausen, E. J., 1833
 Wells, D. G., 2256
 Wells, H. D., 875, 3763, 4372, 4397-8
 Wells, O. O., 6986
 Wells, S. A., 2435
 Welsh, J. R., 398, 413, 1999, 2204, 2222
 Wene, G. P., 4664
 Wensley, R. N., 5168
 Went, H. A., 5355
 Wenzl, H., 2719
 Werner, M. M., 3436, 7214
 Wernham, C. C., 6220
 Wernsman, E. A., 1131, 4535
 Wersuhn, G., 3606
 Wessels, J. P. H., 1762
 Westwood, M. N., 6824, 6828
 Westwood, M. S., 1266
 Westwood, N. N., 2976
 Wettstein, D. von, 4219
 Wexelson, H., 844
 Whalen, R. H., 1569
 Whelan, E. D. P., 3037
 White, F. H., 1140
 White, R. A. J., 1562
 White, T. G., 984, 1011
 Whitehead, R. A., 1318, 1320, 1322, 1328-9, 3091, 5364
 Whitehead, W., 6134
 Whitehouse, H. L. K., 42, 5370
 Whitehurst, S. H., 2588
 Whitmore, E. T., 754
 Whitwell, J. D., 5151
 Widstrom, N. W., 6217
 Wiebe, G. A., 253
 Wiersema, H. T., 3659, 5456
 Wierzba, M., 6650

 Wiggin, H. C., 2318
 Wiklund, K., 1694, 6093, 6224
 Wiley, R. C., 6812
 Wilkie, D., 7220
 Wilkinson, W. S., 770
 Willey, L. A., 1072
 Williams, A. F., 537
 Williams, D. D. F., 4197
 Williams, D. H., 4481
 Williams, E. B., 2996
 Williams, J. C., 644
 Williams, K. E., 2324
 Williams, L. E., 2394
 Williams, L. V., 1320, 1328
 Williams, M., 2097
 Williams, N. D., 350, 440, 446
 Williams, P. H., 1523-4, 5124, 7041
 Williams, R. J., 2030, 2586, 5561, 5570
 Williams, S. B., 6094
 Williams, W. T., 183
 Willis, J. C., 3461
 Wills, A. B., 5149
 Wilsie, C. P., 2614, 2623, 4377, 4477, 4485
 Wilski, A., 942, 6528-9
 Wilson, C. M., 6160
 Wilson, F. D., 1051-2, 6592
 Wilson, G. B., 5421
 Wilson, G. F., 4431
 Wilson, H. R., 1779
 Wilson, J. A., 2170
 Wilson, J. F., 6776
 Wilten, W., 4206-7
 Wilton, A. C., 775, 777
 Winieski, J. A., 1406-38
 Winton, L. L., 1481-5
 Wise, M., 3955, 3988
 Wismer, W., 4433
 Wit, F., 3650, 5445
 Witkus, E. R., 1813
 Wittes, R. E., 61
 Wittmer, G., 6671, 6678
 Włodarczyk, A., 95
 Wöhrmann, K., 920
 Wojciechowska, W., 872
 Wolf, F. A., 1128
 Wolfe, M. S., 291, 2144, 2253
 Wolfenbarger, D. O., 4950
 Wolff, S., 33
 Wolffhardt, D., 5492
 Wolter, J., 3823
 Wong, T. K., 3061
 Woo, S. C., 2495
 Wood, C. A., 1335
 Wood, G. M., 766
 Wood, G. W., 3111
 Wood, R. L., 980
 Woodard, O. J., 1520
 Woodbury, G. W., 4573
 Woodward, R. S., 1561, 3773, 5287, 7155
 Woodard, R. W., 626
 Woodwell, G. M., 6950
 Woolliams, G. E., 5133
 Worker, G. F. (Jun.), 687
 Workman, P. L., 1798, 5399
 Wormer, T. M., 2893
 Worthington, R. E., 578
 Worzella, W. W., 675, 3624, 5464
 Woyke, H., 1505, 1512
 Wricke, G., 3653, 5450
 Wright, C. E., 785, 2570, 2613, 4379
 Wright, D. S. C., 2887
 Wright, G. M., 2280, 3273
 Wright, J. A., 778

- Wright, J. W., 1395, 5101
Wright, L. N., 807
Wright, S., 3536
Wu, C.-T., 1157-8, 4759
Wu, H.-P., 3390
Wu, L.-C., 743
Wu, M.-H., 1667
Wulf M., H., 370, 2173
Wullinger, F., 6267
Wustrack, H.-J., 1689
Wuttke, H., 5581
Wuu, K. D., 2417-8
Wyllie, T. D., 1668
Wysocka, D., 4603
- YABUNO, T., 2451
Yadav, I. S., 5015
Yagil, E., *see* Yagil, E. A.
Yagil, E. A., 2403, 6239
Yakimova, Y., *see* Jakimova, Ja.
Yamada, T., 7129
Yamaguchi, J., 4320
Yamaguchi, T., 2916-9, 5122, 6369
Yamamoto, H., 6283
Yamamura, I., 6350, 6359-60
Yamasaki, T., 2548, 5337
Yamasaki, Y., 4336-8
Yanagisawa, T., 7008
Yanagishima, N., 7222, 7228
Yanakieva, *see* Janakieva
Yang, F.-P., 698, 735
Yang, L.-H., 6365
Yang, S. C., 741
Yang, S. F., 7156
Yankulov, Y., *see* Jankulov, J.
Yanofski, C., 3557
Yarwood, C. E., 589
Yashina, *see* Jašina
Yasuda, S., 393, 6240, 6261
Yasumuro, Y., 4342
Yasuo, S., 6369
Yatzenko-Khmelevsky, *see* Jacenko-Hmelevskij
Yau, T. M., 7217
Yawalkar, K. S., 2251
Yeh, P.-Z., 6365
Yeh, S.-F., 734
Yen, D. E., 4612
Yen, K.-P., 2515
Yen, S.-T., 729
Yenikejev, Kh. K., *see* Enikeev, H. K.
Yeoman, M. M., 7030
Yeremeyeva, *see* Eremeeva
Yllö, L., 3980, 4042, 4562, 4581
Yllö, T. L., 883
Yonemoto, T., 2917-9
Yoo, J. K., *see* Yu, C.-K.
York, J. O., 514, 2331, 2461, 4118
Yoshii, H., 6362
Yoshimura, H., 4198
Yoshiyama, T., 6463
Youn, K. B., *see* Yen, K.-P.
Young, D. A., 2691
Young, E. F., 994
Young, E. F. (Jun.), 995, 2767
Young, F.-P., *see* Yang, F.-P.
Young, H. C. (Jun.), 6380
Young, L. C., 912
Young, N. R., 6455
Young, R. M., 3959
Young, S. S. Y., 5403
Young, W. A., 2675, 3772, 5189
Young, W. I., 2433
- Young, W. J., 65
Younis, S. E. A., 493
Yousef, R., 1126
Yu, C.-C., 1549
Yu, C.-H., 5287
Yu, C.-K., 3075
Yu, H.-M., 1041
Yuan, T.-P., 642
Yukova, *see* Jukova
Yun, K.-H., 2127
- ZABALA, S., 1367
Zacha, V., 1355
Zachow, F., 6469
Zadina, J., 933, 4553, 4589, 4602, 4607, 6490, 6492, 6511, 6517-9
Zadoks, J. C., 294
Zadoncev, A. I., 4009
Zagorodnii, L. S., 7029
Zagovova, A. V., 5663-4
Zaharenko, Z. P., 6034
Zaharov, I. A., 1698, 3437
Zahoor, M., 1552
Zaika, S. P., 516
Zajcev, A. I., 5222
Zajceva, N., 4568, 4584
Zakharov, *see* Zaharov
Zajkovskaja, N. Ė., 4726
Zajnišev, A., 996
Zakrevskaja, L. E., 4135
Zalenskij, O. V., 3836
Žalilov, O., 2067, 2759
Zaman, S. M. H., 4295
Zana, J., 4720, 6620, 6628
Zanini, E., 3828
Zankov, Z., 5014
Zankow, *see* Cankov
Zannini, N., 2347
Zannone, L., 2651
Zapata B., M., 3998
Zarapkin, L. S., 3467
Zapryanov, Z., 6047
Zapryanov, *see* Zapryanov, Z.
Zarbaliev, I. T., 6196
Zarger, T. G., 1469
Zarić, L., 6193
Zariñ, D., 1703
Zarina, *see* Zariñ
Žarinov, V. I., 6413
Zarubailo, T. Ya., *see* Zarubajlo, T. Ja.
Zarubajlo, T. Ja., 2051, 3841
Zaruckaja, L. S., 2937
Zavarin, E., 6998
Zavodnov, V. S., 3180
Žavoronkov, P. A., 4902, 5371
Zawadzka, B., 2960
Ždanov, A. P., 7131
Ždanov, Ju. A., 164
Ždanov, L. A., 1889, 4809
Zdor, P. S., 6796
Žebrak, A. R., 5517
Žebrak, Ė. A., 6111
Zečević, L., 99, 6109
Zeeuw, D. de, 5592
Zeijlemaker, F. C. J., 4817
Zeist, W. van, 3893
Žekov, P., 671
Želenskij, M. A., 516, 570, 4883
Železnikova, V. I., 3014
Železnov, A. V., 2062
Železnova, N. V., 5431
Zeller, A., 3629
Želtova, E. T., 5330
- Zemelman, R., 854
Zennyoji, A., 4043
Zennyoz, *see* Zennyoji
Zenteno Zevada, M., 2387
Zentmyer, G. A., 6883
Zethner-Møller, O., 5112
Zeven, A. C., 3918, 6038
Zezjulinskij, V. M., 3813
Žhalilov, *see* Žalilov
Žhavoronkov, *see* Žavoronkov
Zhdanov, *see* Ždanov
Zhebrak, E. A., *see* Žebrak, Ė. A.
Zheleznov, *see* Železnov
Žheltova, *see* Želtova
Zhukova, *see* Žukova
Židkova, N., 1495
Ziegler, G., 931
Zielinski, Q. B., 1246, 2976
Zillinsky, P. J., 6089
Zilm, B., 1617
Zimmer, D. E., 4369
Zimmerman, L. H., 2921
Zimmermann, F. K., 1720, 3445, 5333, 7215
Zimmermann, W., 46
Zinkovskaja, L. A., 5915
Žirnovnikov, A. P., 5907
Žirhovnikov, V. P., 4651
Žironkin, I. M., 2085
Zitelli, J., 305, 312, 315, 318
Zlenko, R. N., 6817
Zobel, B. J., 1401, 1431
Zocca, A., 2957, 6895
Zohary, D., 6097
Zolotarev, M. P., 3181
Zolotarev, S. I., 5629
Žoludeva, V. P., 6191
Zoschke, M., 4243
Zosimović, V. P., 2084, 5519
Zosimovich, *see* Zosimoič
Zotov, S. S., 2785
Zotov, V. V., 1392, 5750
Zoz, N. N., 3475
Zscheile, F. P. (Jun.), 4025
Zubeckis, E., 4864
Zubeldia, A., 822
Zubeldia Lizarduy, A., 909
Zubenko, G. N., 34
Zuber, M. S., 499, 571, 574
Zubko, I. Ja., 435, 5616-7
Zubkova, I. G., 1379
Zucker, M., 941
Zuckerman, B. M., 6909
Žučkova, E. N., 3100
Žufa, L., 6966, 6976
Žuk, J., 125, 7056
Žuk, V. M., 4083
Žukov, O. S., 5371
Žukova, P. G., 3592
Žukova, V., 5766, 5779
Žukova, V. P., 5824
Žukovskij, P. M., 3513, 3831, 3834, 5841
Zuleta M., E., 1639
Zummo, N., 4708
Zunnunov, A. A., 5820, 5834, 6580
Žuravel', M. S., 3140, 5739
Zvoskova, N. S., 2317
Zwartz, J. A., 2704
Zwingelberg, H., 3621
Zwintzsch, M., 1247, 4844
Zych, C. C., 3102, 4981
Zyl, L. F. van, 6468

SUBJECT INDEX

to Plant Breeding Abstracts, Volume XXXVII

α RAYS

- Hordeum*. Barley, 612
- Abelmoschus*, see *Hibiscus*
- Abies*. Fir
 - Apomixis, 5108
 - Biotypes, 6951
 - Geographical races, 3234, 7008
 - Hybridization, interspecific, 1489
 - Pollen, 1490-1
 - Seedlings, 3234
 - Temperature, effect of, 1491
- Acacia*, for tanning
 - Flavonoids, 4817
 - Genetics, 4817
 - Taxonomy, 4818
- Acanthoscelides*
 - Phaseolus*. Lima bean, 7147
- Acclimatization
 - Gossypium*. Cotton, 2784
 - Medicago*, 822
 - Zea*. Maize, 6164
- Acer*
 - Flower, 5065
 - Mutation, induced, 2078
 - X rays, 2078
- Acer*, for sugar
 - Pollination, 4741
- Aceria*
 - Saccharum*. Sugar cane, 2852
- Acetobacter*, 7208-9
 - Taxonomy, 7209
- Acetomonas*, 7208
- Acridine, 1787, 7226
 - Lycopersicon*. Tomato, 1574
- Acrocyllindrium*
 - Oryza*. Rice, 739
- Actinidia*
 - Sex, 3095
 - Varieties, 3094
- Actinomycin
 - Triticum*. Wheat, 5547
- Acyrtosiphon*
 - Medicago*, 2631
 - Physiological races, 1612
 - Pulses, 1612
- Aesculin
 - Solanum*. Potato, 2943
- Adaptation, 1751, 3586, 3653, 5450
 - Avena*. Oats, 4064
 - Cannabis*. Hemp, 6587
 - Hordeum*. Barley, 6262
 - Leguminous forage crops, 4454
 - Triticum*. Wheat, 6000-2
 - Venturia*, 2997
- Adenine derivatives
 - Triticum*. Wheat, 4008
- Adenosine triphosphate, 158, 3612
- ADP-glucose-starch glucosyl transferases
 - Zea*. Maize, 11
- Aegilops*
 - Cercospora*, 2148
 - Chromosome aberrations, 2218, 3992
 - Chromosome morphology, 2214
 - Chromosome substitution, 2218

Aegilops—continued

- Cytoplasmic inheritance, 3705-6
- Erysiphe*, 4017
- Genetics, 2271, 3709, 3924, 3935
- Genome analysis, 4043
- History and evolution, 1831, 3709, 4017
- Hybridization intergeneric, 460, 1831, 2218, 3705-6, 3709, 3712, 3924, 3935-6, 3974, 4043-5, 5984-5
- Hybridization, interspecific, 2271
- Meiosis, 3936
- Plant collections, 4045
- Protein, 3992
- Puccinia*, 3935, 5486
- Sterility, male, 3926, 3974
- Synthetics, 3924
- Affinity, genetic, 1766, 3552
- Aflatoxin
 - Vicia*. Broad bean, 3480
- Agaricales
 - Taxonomy, 7236
- Agaricus*
 - Biotypes, 3684
 - Selection, artificial, 1736, 5351
- Agave*
 - History and evolution, 6593
 - Hybridization, interspecific, 212, 2812, 6593
- Aging
 - Malus*. Apple, 4884
 - Pinus*. Pine, 6989
 - Prunus*. Plum, 6840
 - Triticum*. Wheat, 5995
 - Vitis*, 5011
 - Zea*. Maize, 2372
- Agriculture, 3463
 - Cereals, 1746
 - Crop plants, 1745
- Agrobacterium*
 - Vitis*, 3174
- Agronomy, see agriculture
- Agropyron*
 - Aneuploidy, 2559
 - Chromosome aberrations, 5988
 - Chromosome morphology, 2606
 - Chromosome number, 457
 - Chromosome substitution, 443, 2219, 3686, 3931
 - Colour, 2609, 5983
 - Cytology, 2180
 - Endosperm, 5983
 - γ rays, 2048
 - Genetics, 1986, 2609
 - Genome analysis, 2604-5, 3711, 4450-1
 - Hybridization, intergeneric, 114, 236, 268-9, 349, 443, 457, 2037, 2048, 2178, 2180-2, 3514, 3686, 3712-3, 3931, 3944, 4044, 5486, 5983, 5988, 5991-4
 - Hybridization, interspecific, 2603-5, 2607, 3711-3, 4411, 4449-52, 6412
 - Inbreeding, 810
 - Inflorescence, 2609
 - Meiosis, 4452
 - Mutation, induced, 2048
 - Polyploidy, 810-1, 2607, 4451, 6412
 - Puccinia*, 443, 5994
 - Segregation, 2037
 - Serology, 2608

Agropyron—continued

- Sterility, fertility, 349, 1986, 5535, 6412
- Taxonomy, 2608
- Translocation, 443, 3686
- Varieties, 2096
- Viruses, 457

Agrostis

- Cochliobolus*, 4408
- Population genetics, 6376
- Sclerotinia*, 4421
- Selection natural, 6376
- Varieties, 5361
- Variety trials, 4405

Alcohol dehydrogenase

- Zea*. Maize, 4103

Alder, *see* *Alnus*

Aldolase

- Piricularia*, 743

Aleurites. Tung

- Chromosome aberrations, 6752
- Grafting, 3751
- Hybridization, interspecific, 6752
- Meiosis, 6752

Alfalfa, *see* *Medicago*

Alkaloids, 7212

- Ipomoea*. Sweet potato, 6764

- Lupinus*. Lupin, 3684, 4456,

- Nicotiana*. Tobacco, 1127, 1129, 6671, 6683, 6687

- Papaver*. Poppy, 1177, 4781-2, 6721

Alkanesulphonic esters

- Hordeum*. Barley, 4221

Alkylating agents, 3457

- Hordeum*. Barley, 4222

Alleles, *see* genetics

Alleles, multiple, *see* multiple alleles

Allium

- Cell division, 174, 3599, 5419-20

- Chromosome aberrations, 1818

- Cytology, 5135

- Diazo compounds, 5419

- Diazouracil, 1813

- Digitonin, 5420

- Heterozygosis, 3267

- Ionole, 1818

- Meiosis, 5135

- Molecular genetics, 174

- Mutation, 1818

- Naphthaleneacetic acid, 5134

- Polyploidy, 174, 1813, 1825, 5134

- Somatic reduction, 5134

- Taxonomy, 1514

- Varieties, 3268

Allium. Chives

- Ecotypes, 5138

- Polyploidy, 5138

- Variety trials, 3703

Allium. Garlic

- Biotypes, 1515, 3270

- Breeding, 2951

- Quality, nutritive value, 3270

- Varieties, 3253, 3269, 5137

- Variety trials, 5136

Allium. Leek

- Puccinia*, 3682

- Variety trials, 1513

Allium. Onion

- Bolting, 1509, 3265

- Breeding, 213, 1510

- Butter yellow, 5419

- Caffeine, 1825

- Cardiazol, 5418

- Cell division, 1810-1, 1813, 5418

- Chemicals, effect of, 175, 1819

- p*-Chloromercuribenzoic acid, 173

- Chromosome aberrations, 164, 173, 1508, 1819, 1822, 3264

Allium Onion—continued

- Colour, 5128

- Cytology, 3591

- Ethyl alcohol, 1508

- Fluoride, sodium, 1822

- Gallocyanin-chrome-alum, 3591

- Genetics, 1507, 5128, 7031

- Growth period, 1510, 5720

- Heterosis, 3331

- Hybrid varieties, 3262

- Light, effect of, 1509

- Magnetism, effect of, 1811

- Nucleic acids, 3591

- Ozone, 7031

- Phenethyl alcohol, 3264

- Plant collections, 1506

- Polyploidy, 123, 175-6

- Pyrenochaeta*, 5133

- Pyridinium salts, 164

- Quality, for drying, 5130-1

- Quality, for storage, 5132

- Quality, nutritive value, 5129

- Radioactive isotopes, 1508

- Seed, 5128

- Seed production, 1512

- Sterility, male, 1511, 3266

- Temperature, effect of, 1512

- Thalidomide, 1508

- Tributyl-2,4-dichlorobenzylammonium chloride, 1511

- Varieties, 224, 1500, 3241, 3252-3, 3263, 7032

- Variety trials, 1505-6, 5127

- Viruses, 5720

- Viscum* extracts, 176, 3599

Allopolyploidy, *see* Polyploidy

Almond, *see* *Prunus*

Alnus. Alder

- Genetics, 1463

Alpha rays, *see* α rays

Alsike clover, *see* *Trifolium*

Alternaria

- Beta*. Sugar beet, 1118, 3657

- Citrus*, 4939

- Crop plants, 5933

- Linum*. Linseed, 6749

- Nicotiana*. Tobacco, 6649, 6689

- Physiological races, 4939, 5933

- Solanum*. Potato, 2713

- Triticum*. Wheat, 453, 1897, 2269, 6060

Aluminium

- Eragrostis*, 2601

Amelanchier

- Hybridization, 1296

- Polyploidy, 1296, 5536

- Varieties, 1296

Aminoacids, 1702, 1735

- Beta*. Sugar beet, 3823

- Corchorus*. Jute, 1044

- Hordeum*. Barley, 6264

- Morus*. Mulberry, 4945

- Nicotiana*. Tobacco, 6699

- Solanum*. Potato, 6524

- Torulopsis*, 1735

- Triticum*. Wheat, 427, 3706, 3823, 5844

- Vitis*, 3200

- Zea*. Maize, 3823, 6125, 6193

Ammonium sulphate

- Lycopersicon*. Tomato, 1597

Amomum

- Viruses, 2904

Amphidiploidy

- Brassica*, 5140

- Festuca*, 1874, 3787

- Hordeum*. Barley, 609

- Lolium*, 1864, 1874, 2007

- Nicotiana*. Tobacco, 2867, 4750, 6678

- Amphidiploidy—continued
Phaseolus, 5258, 7143
Prunus. Plum, 4855
Secale. Rye, 348, 2183
Triticum. Wheat, 348, 2183
Vicia. Vetch, 4525
 see also polyploidy
- Amphorophora*
Malus. Apple, 3686
Rubus. Raspberry, 218, 3103, 3686, 6772
Amygdalis. Nectarine, see *Prunus*
Amygdalis. Peach, see *Prunus*
- Amylose
Zea. Maize, 499, 571
- Ananas. Pineapple
 Breeding, 3137
 Pollen, 3137
 Quality, for canning, 1364
 Radiation, 3138
 Vegetative reproduction, 3138
- Anatomy
Citrus, 1288
Glycine. Soya bean, 1672
Hordeum. Barley, 5614
Populus. Poplar, 5087
Salix. Willow, 5087
Tephrosia, 1230
Trifolium. Red clover, 849
Triticum. Wheat, 2250
Zea. Maize, 4137
- Andrecium, see flower
- Androgenesis
Zea. Maize, 5431
- Anethum*
 Essential oil, 5325
- Aneuploidy, 3614, 5339
Agropyron, 2559
Avena. Oats, 1870, 1973, 2004, 2282, 2284, 4062, 6099–101
Beta. Sugar beet, 2859, 3685, 4718
Cynodon, 768
Dactylis, 1879
Gossypium. Cotton, 1011
Hordeum. Barley, 2419–20, 3868
Larix. Larch, 3236–7
Lolium, 2574–5
Lycopersicon. Tomato, 24, 1578, 7109
Nicotiana. Tobacco, 2878
Panicum, 6407
Pennisetum, for grain, 658, 4258, 4393
Saccharomyces, 5339
Secale. Rye, 2297, 4084–5, 6109
Sorghum, 4272, 4275
Trifolium. Red clover, 4513
Triticum. Wheat, 346, 380–1, 429, 2215, 2221, 3868, 3962, 6036
Vicia. Broad bean, 5249
Vicia. Vetch, 4525
Zea. Maize, 548, 2367, 6176
- Annona*
 Breeding, 1844
 Genome analysis, 1896
 Meiosis, 1294
 Varieties, 3069
- Anther, see pollination and flower
- Anthesis, see flower
- Anthocyanin
Asparagus, 3684
Phaseolus, 1622
Pyrus. Pear, 6821
Secale. Rye, 1754
Vitis, 3139, 3189
- Anthonomus*
Gossypium. Cotton, 1029–30, 2792
- Antibiotics, 5417, 7208, 7211, 7229
 Leguminous forage crops, 819
Streptomyces, 1704
Trichothecium, 1737
- Aphanomyces*
 Physiological races, 1691, 5313
Pisum. Pea, 1691, 5313
- Aphelenchoides*
Fragaria. Strawberry, 5790
Oryza. Rice, 5790
- Aphids
Beta. Sugar beet, 6643
- Aphis*
Humulus. Hop, 2900
- Apis*
Brassica. Cabbage, 5145
Trifolium. Red clover, 847
- Apium*. Celery
 Boron, 3297
Cercospora, 2004
 Cold resistance, 7064
 Manganese, 3297
 Selection, artificial, 7064
 Variety trials, 1542, 3296
- Apocynum*
Septoria, 5913
- Apomixis, 1827–8, 5434
Abies. Fir, 5108
Axonopus, 6405
Brassica, 1518–9, 5142
Cenchrus, 4444
Cichorium. Chicory, 1236
 Crop plants, 1828, 5585
Deschampsia, 2600
Malus. Apple, 4890
Paspalum, 793, 2584, 3760
Pennisetum, 2599, 3761, 6409
Pennisetum, for grain, 659
Poa, 3825, 4403
Raphanus. Radish, 5142
Rubus, 1334
Rubus. Dewberry, 1337
Secale. Rye, 6022
Triticum. Wheat, 6022
Zea. Maize, 5430
- Apple, see *Malus*
- Apricot, see *Prunus*
- Arabinosyl-adenine
Vicia. Broad bean, 3607
- Arachis*. Groundnut
 Breeding, 1309, 1860, 2004, 3081, 4961, 6873
 Climate, 3752
 Colour, 3081
Diabrotica, 2002, 4970
 Dormancy, 4964
 Embryo, 1306
 Flower, 4965
 γ rays, 1306
 Genetics, 2002, 4962, 4970, 6872
 Growth period, 1310
 Habit, 6872
 Heat, drought resistance, 1312–3, 4967–8
 Hybridization, 1306
 Hybridization, interspecific, 1307, 4785
Meloidogyne, 5935
 Mutation, induced, 1859
Mycosphaerella, 1960, 3751, 4785, 4969
 Pollination, 1311
 Polyploidy, 1307, 4785
Pseudomonas, 1314
 Quantitative characters, 4962, 6873
 Radiation, 1955
 Reproduction, 4965
 Seed, 1959, 3081
 Successional crops, 4966

- Arachis*. Groundnut—continued
 Varieties, 1308–9, 1893, 1899, 1960, 3752, 4963
 Variety trials, 213, 1305, 5528, 5582
 Viruses, 1860, 1955
 X rays, 1859
 Yield, 4966
- Arceuthobium*
Pinus. Pine, 1419
- Areca*
 Chromosome morphology, 3084
 Meiosis, 3083
 Pollen, 3082
 Polyembryony, 4971
 Reproduction, 3083
- Armoracia*. Horseradish
 Breeding, 1194
 Meiosis, 2941
 Plant collections, 1194
 Polyploidy, 2941
 Taxonomy, 1193
- Arracacia*
 Quality, nutritive value, 6483
 Variety trials, 6483
- Arrhenatherum*
 Pollination, 2583
 Sterility, fertility, 2583
 Variation, 2582
 Varieties, 791
- Arseno compounds
Hordeum. Barley, 4232
- Artemisia*
 Varieties, 3427
- Artocarpus*
 Breeding, 3068
 Varieties, 3068
- Asafetida
Lagenaria, 7084
- Ascochyta*
Cicer. Chickpea, 5317–8, 5733
Medicago, 3756
Pisum. Pea, 5717, 5728, 5730, 5864, 7196
Triticum. Wheat, 3756
Vicia. Broad bean, 5864
- Ascorbic acid
Dioscorea. Yam, 2865
Lycopersicon. Tomato, 3637
Pisum. Pea, 1610
Vicia. Broad bean, 1610
- Asparagus*
 Anthocyanin, 3684
 Chromosome aberrations, 7035
 Colour, 1516, 7034
 Genetics, 1516, 7034
 Mutation, spontaneous, 7034
 Polyploidy, 1517, 7035
 Sex, 1236, 3700
 Sex chromosomes, 1517, 3684
 Varieties, 3684
 Variety trials, 7033
- Aspergillus*, 1709–10
 Chemicals, effect of, 3487
 Citric acid, 1710
 Gravity, 1709, 5330
 Mutation, induced, 1709, 5330
 Quality, for fermentation, 5330
 Ultraviolet rays, 106, 1709, 5330
- Aspidiotus*
Malus. Apple, 5772
Prunus. Plum, 5772
- Astragalus*
 Breeding, 4540
 Heterosis, 4539
 Pollination, 4539
 Yield, 4540
- Asynapsis
Avena. Oats, 2284
Hordeum. Barley, 632
Nicotiana. Tobacco, 6686
Oryza. Rice, 4300
- Asyndesis, see Asynapsis
- Atherigona*
Sorghum, for grain, 666, 694
- Atrazine
Sorghum, for grain, 695
- Atropa*
 Atropine, 4819
 Geographical races, 4819
 Scopalamine, 4819
- Atropine
Atropa, 4819
- Atylosia*
 Hybridization intergeneric, 1839
- Aubergine, see *Solanum*.
- Aulacaspis*
Saccharum. Sugar cane, 1065
- Aulacophora*
Lagenaria, 4688
Luffa, 4688
- Autopolyploidy, see polyploidy
- Auxins, 7222
- Avena*. Oats
 Adaptation, 4064
 Aneuploidy, 1870, 1973, 2004, 2282, 2284, 4062, 6099–101
 Asynapsis, 2284
 Breeding, 187, 195, 1862, 1970, 2124, 2142, 4051
 Chlorophyll, 4053
 Chromosome aberrations, 469
 Chromosome morphology, 6098
 Climate, 5963
Cochliobolus, 2004, 2130, 6101
 Cold resistance, 472–4, 1875, 3786
 Colour, 4076
 Crossing over, 1879
 Density of stand, 474
 Diethyl sulphate, 2130
Ditylenchus, 2293
 Dominance, 462
 Dormancy, 4063
Erysiphe, 647, 1865, 1875, 4068–9, 5486
 Ethyleneimine, 2130
 Fatty oil, 470
 Flower, 4052
 Fungi, 5959
 γ rays, 2130
 Genetics, 465, 469, 645, 647, 649, 1973, 2273, 2284, 2287, 2290–2, 4052, 4068–9, 4071–2, 6089, 6100
 Genome analysis, 464, 4061
 Germination, 6102
 Glucose, 4053
 Growth period, 195, 279, 3699, 3896
 Hairs, 465
 Heat, drought resistance, 4066
 Height, 467
Heterodera, 200, 480, 5934
 Heterosis, 1879, 6090
 History and evolution, 1879, 4060–1, 6097–8
 Hybridization, 463, 3786
 Hybridization, interspecific, 464–5, 1865, 1870, 2283–4, 4052, 5934
 Inflorescence, 469
 Legislation, 4059
 Lodging, 2286, 4067, 6105
 Meiosis, 2281, 2283, 6099
 Micurinism, 4054
 Mixtures of crops or genotypes, 2285, 6105
 Morphology, 6100
 Mutation, induced, 466, 2130, 2274
 Mutation, spontaneous, 4053
 Neutrons, 466, 2274

Avena. Oats—*continued*

- Nutrients, 2140
- Pollination, 635, 2274
- Polyploidy, 2281, 2283, 4061
- Puccinia*, 307-8, 310-2, 477-9, 1963, 2289-92, 3682, 4071-6, 5862, 6107
- Pyrenophora*, 4075
- Quality, nutritive value, 2138
- Segregation, 472
- Selection, artificial, 467
- Selection, natural, 473-4
- Sowing, 4064
- Temperature effect of, 4053
- Tilletia*, 5630
- Ustilago*, 475-6, 1963, 2287-8, 4070
- Varieties, 274, 468, 2026, 2131, 2275-80, 3755, 3802, 3862-3, 3892, 4055-9, 5487, 5490, 5538, 5950, 5953, 6092-6
- Variety trials, 188, 263, 461, 2272, 3862-3, 3892, 4048-50, 4066, 5534, 5938-9, 5945, 5959, 6088
- Viruses, 2149, 4075
- Water, effect of, 6102
- Yield, 471, 2140, 4065

Averrhoa

- Heterostyly, 3096
- Pollination, 3096
- Varieties, 2097

Avocado, *see Persea*

Axonopus

- Apomixis, 6405
- Hybridization, interspecific, 6405
- Polyploidy, 6405
- Taxonomy, 6405

Azulene

- Matricaria*, 4821

β RAYS

- Oryza*. Rice, 2532

Back crossing

- Glycine*. Soya bean, 1645
- Gossypium*. Cotton, 990, 6552
- Hordeum*. Barley, 3869
- Malus*. Apple, 4903
- Oryza*. Rice, 2507
- Phaseolus*, 3510
- Triticum*. Wheat, 341, 3869, 5979
- Zea*. Maize, 571

Bacteria, 1790, 5389-90, 5545, 5562

- Brassica*. Cabbage, 5892
- Crop plants, 5622
- Hordeum*. Barley, 1963
- Medicago*, 3756
- Nicotiana*. Tobacco, 2002
- Oryza*. Rice, 737
- Phaseolus*, 3386, 5732
- Populus*. Poplar, 1451
- Prunus*. Apricot, 1965
- Solanum*. Potato, 6521
- Stone fruits, 1976
- Vicia*. Broad bean, 5731
- Zingiber*. Ginger, 4866
- Bacteriophages, 1784, 5393
- Bahia grass, *see Paspalum*
- Baking quality, *see quality*

Bambusa

- Hybridization intergeneric, 2831
- Pollination, 2831

Banana, *see Musa*

Barley, *see Hordeum*

Bean, *see Phaseolus and Vicia*

Beard grass, *see Andropogon*

Beech, *see Fagus*

Beet, *see Beta*

Beetroot, *see Beta*

Benincasa

- Hybridization, graft, 5174
- Hybridization, intergeneric, 5174
- Quality, of edible product, 5174

Bent, *see Agrostis*

Bermuda grass, *see Cynodon*

Beta

- Cercospora*, 3682
- Chromosome number, 6476
- Hybridization, 6477
- Hybridization, interspecific, 200
- Pegomyia*, 5725
- Polyploidy, 200, 6477
- Sterility, male, 200
- Viruses, 200

Beta. Beetroot

- Varieties, 224, 3240-1, 3251, 5119
- Variety trials, 5118

Beta. Chard

- Varieties, 1968, 5119

Beta. Mangel

- Bolting, 5487
- Cytoplasmic inheritance, 6478
- 2,3-Dichloroisobutyrate, sodium, 6480
- Fertilization, sexual, 1091
- Heterosis, 6478
- Leaf, 6633
- Monogerm seed balls, 198
- Polyploidy, 4544, 6478, 6633
- Quality, nutritive value, 2664
- Sterility male, 198, 6480
- Varieties, 6479
- Variety trials, 2664, 4543-4, 6475
- Viruses, 198

Beta rays, *see β rays*

Beta. Sugar beet

- Alternaria*, 1118, 3657
- Aminoacids, 3823
- Aneuploidy, 2859, 3685, 4718
- Aphids, 6643
- Biochemistry, 6632
- Bolting, 1111, 1891, 5793
- Breeding, 186, 1891, 2856, 4712-3, 4718, 6623
- Catalase, 6635
- Cell division, 4717
- Cercospora*, 1117, 1119, 5794, 5798, 6635, 6641-2
- Colour, 1085, 1100
- Combining ability, 1083
- Cytoplasmic inheritance, 1106, 6478
- Endomitosis, 3685
- Erysiphe*, 4739
- Fertilization, sexual, 1092
- Fruit, 1108
- Fungi, 4737
- γ rays, 85
- Genetics, 1119, 2861, 4714, 4730, 5486
- Germination, 1095-6
- Growth period, 2863
- Heat, drought resistance, 1087
- Heterodera*, 2864, 5486, 5891
- Heterosis, 1099, 6478, 6631
- History and evolution, 2856
- Hybrid varieties, 1074-5, 1079, 1090, 1094, 1105, 2855-2858, 4736, 5794
- Hybridization, 1097, 1100, 4715, 4721
- Hybridization, graft, 4716
- Hybridization, interspecific, 5486, 5890-1
- Irrigation, 6639
- Leaf, 4722, 6633
- Meiosis, 4718
- Micurinism, 1077
- Monogerm seed balls, 1079, 1086, 1095, 1112-4, 1116-3685, 3815, 4714, 4728-33, 5487
- Mutation, induced, 85, 1076
- Neutrons, 1076

Beta. Sugar beet—*continued*
 Osmosis, 5799
 Pathology, 5792, 5795
Pegomya, 5725
Peronospora, 4738, 5486, 5793
 Peroxidases, 6635
Phoma, 5799
 Plastids, 3685
 Pollen, 6632
 Pollination, 1088
 Polyhaploidy, 1110
 Polyphenoloxidase, 6635
 Polyploidy, 188-9, 1075, 1079, 1081-7, 1089-90, 1092-7, 1099-109, 1112-3, 2084, 2857-8, 2860, 3677, 3685, 3823, 4718-26, 4740, 5486, 5502, 5794, 6478, 6628-31, 6632-4, 6638
 Population genetics, 1107
 Protein, 4736
 Quality, nutritive value, 4732, 4734
 Radiation, 2084
 Respiration, 6631
 Root, 6637
Sclerotinia, 5795-7, 5800-1
 Seed, 1115-6
 Seed production, 1890, 4733
 Seed testing, 6638
 Seedlings, 1085
 Selection, artificial, 4731, 5796, 6627
 Sterility, male, 1106, 2861-2, 3685, 4714, 4727, 6636
 Sugar, 1077, 2855, 2863, 4715, 4721, 4724, 4735
 Taxonomy, 4723
 Temperature, effect of, 6636
 Varieties, 1078-80, 2862, 3815, 5792
 Variety trials, 203, 1072-3, 1883, 2857, 3688, 4709-11, 4720, 6620-2, 6624-6, 6630
 Viruses, 1118, 3657, 4738-40, 5454, 5486, 5890
 Water balance, 5797
 Water, effect of, 1077
 X rays, 1089, 4716
 Yield, 1114, 4724, 4733, 6634

Betula. Birch
 Combining ability, 3221
 Flower, 1460
 Hybridization, 5044
 Hybridization, interspecific, 1459, 6979
 Quality, of timber, 6979
 Quantitative characters, 6980
 Taxonomy, 1459, 1461-2, 6980
 Variation, 1460

Bilberry, *see* *Vaccinium*
 Biochemistry, 1770, 3462, 7219
Beta. Sugar beet, 6632
Brassica, 3273
Capsicum, 6732
 Cereals, 5957
 Crop plants, 5620
Cucumis. Cucumber, 3323
Fragaria. Strawberry, 1356
Glycine. Soya bean, 1661, 1668
Gossypium. Cotton, 1933, 5903, 6566
Helianthus. Sunflower, 1218
Hordeum. Barley, 2138, 2408
Humulus. Hop, 1181, 1184
Lycopersicon. Tomato, 5195
Musa. Banana, 5007
Oryza. Rice, 4344
Populus. Poplar, 1418
Prunus. Peach, 4934
Pseudomonas, 2105
Puccinia, 4036
Pyrus. Pear, 3008, 3011
Ricinus. Castor oil plant, 2924, 6742
Saccharomyces, 1722, 1731, 3440, 5341, 5345, 7219-21, 7223
Solanum. Potato, 5625, 5703, 6529

Biochemistry—*continued*
 Stone fruits, 6834
Thea. Tea, 6708
Trifolium, 4395
Trifolium. Red clover, 853
Triticum. Wheat, 382, 449, 3629, 3978, 5860
Ustilago, 4070
Vicia. Broad bean, 26
Vigna. Cowpea, 7156
Vitis, 1392, 3139, 6929, 6945
Zea. Maize, 527, 565, 3628, 4137, 4178, 5479
 Biometry, *see* quantitative characters
 Biotin,
 Gossypium. Cotton, 5830, 5847
 Biotypes, 7213
Abies. Fir, 6951
 Agaricus, 3684
 Allium. Garlic, 1515, 3270
 Brassica. Cauliflower, 7052
 Cenchrus, 4444
 Chlorella, 7206-7
 Cichorium. Endive, 3298
 Grasses, 752
 Juglans. Walnut, 1303
 Pinus. Pine, 5093, 6951
 Pisum. Pea, 7190
 Platanus, 3222
 Pseudotsuga. Douglas fir, 3239
 Saccharomyces, 5338
 Secale. Rye, 5595
 Taraxacum, for rubber, 1229
 Thea. Tea, 6707
 Trifolium. Minor species, 1983
 Triticum. Wheat, 271, 5595
 Vitis, 1372, 3167
 Birch, *see* *Betula*. Birch
 Birds
 Sorghum, 693, 2007, 3788, 4283
 Triticum. Wheat, 454
 Birdsfoot trefoil, *see* *Lotus*
 Black currant, *see* *Ribes*
 Blackberry, *see* *Rubus*
 Blue grass, *see* *Poa*
 Blue stem, *see* *Andropogon*
 Blueberry, *see* *Vaccinium*
 Bolting
 Allium. Onion, 1509, 3265
 Beta. Mangel, 5487
 Beta. Sugar beet, 1111, 1891, 5793
 Bombus
 Trifolium. Red clover, 847
 Boron
 Apium. Celery, 3297
 Medicago, 6413
 Onobrychis. Sainfoin, 6413
 Pulmonaria, 6765
 Triticum. Wheat, 3961
 Botany, 5356
 Cereals, 1746
Bothriochloa
 Chromosome number, 2587
Botryodiplodia
 Solanum. Potato, 2668
Botrytis
 Heterocaryosis, 259
 Taxonomy, 258
 Variation, 258-9
 see also *Sclerotinia*
 Bracts, *see* inflorescence
 Bramble, *see* *Rubus*
 Branch, *see* stem
Brassica
 Amphidiploidy, 5140
 Apomixis, 1518-9, 5142
 Biochemistry, 3273

Brassica—continued

- Breeding, 186
- Enzymes, 5141, 7054
- Genetics, 5143, 7041
- Grafting, 3272
- Hybridization, 1900
- Hybridization, interspecific, 1518, 5140, 5593, 7039
- Insects, 7042
- Linkage, 7038
- Matrocliny, 1519, 5142
- Peronospora*, 5143
- Phyllotreta*, 1530
- Plant collections, 5143
- Plasmodiophora*, 2011, 3674, 7041
- Pollen, 1900
- Polyploidy, 3633
- Protein, 3633, 7054
- Rhodanidogenic glucosides, 3634
- Seed, 7039
- Sterility, fertility, 5141, 5446
- Sterility, male, 7038
- Taxonomy, 7054
- Brassica*. Brussels sprouts
 - Cell division, 2941
 - Colour, 1532
 - Genetics, 5155
 - Heterosis, 3331
 - Hybrid varieties, 3240, 3287, 3635
 - Hybridization, graft, 1532
 - Selection, artificial, 5155
 - Varieties, 3252, 3815
 - Variety trials, 2013, 5154, 7049
- Brassica*. Cabbage
 - Apis*, 5145
 - Bacteria, 5892
 - Breeding, 2951
 - Chimeras, 1522
 - Chromosome aberrations, 3278
 - Colour, 1522, 1806
 - Enzymes, 5719
 - Erwinia*, 5148
 - Flower, 5147
 - Growth period, 3257, 3279
 - Heterosis, 7045
 - History and evolution, 7040
 - Hybrid varieties, 3275, 5145
 - Hybridization, graft, 1522, 1532, 1806
 - Inbreeding, 213
 - Morphology, 1806
 - Mutation, induced, 1832
 - Neutrons, 1832
 - Nucleic acids, 1524
 - Nucleolus, 1524
 - Nucleus, 1524
 - Phyllotreta*, 1530
 - Plasmodiophora*, 1523-4, 3280-1, 5717
 - Pollination, 5145-6
 - Protons, 3278
 - Sclerotinia*, 5719
 - Selection, artificial, 5146
 - Serology, 7047
 - Sterility, fertility, 7046
 - Sterility, self, 7040
 - Varieties, 1521, 3252, 3254, 3276-7, 3815
 - Variety trials, 1494, 1520, 1563, 3274-5, 5144, 7043-4
 - Vernalization, 5147
- Brassica*. Cauliflower
 - Biotypes, 7052
 - Breeding, 5152
 - Cold resistance, 7051
 - Growth period, 1887
 - Phyllotreta*, 1530
 - Quality, for freezing, 3755
 - Seed production, 7053
 - Sterility, male, 3284

Brassica. Cauliflower—*continued*

- Varieties, 240, 2092, 3254, 3277, 3283, 3755
- Variety trials, 1529, 5151, 7050-1
- Brassica*. Kale
 - Breeding, 195, 1528, 5485, 5498
 - Cold resistance, 1528
 - Dominance, 3282
 - Genetics, 3503, 5149
 - History and evolution, 7040
 - Hybridization, 1526
 - Hybridization, interspecific, 2666
 - Leaf, 5149
 - Linkage, 5150
 - Phyllotreta*, 1530
 - Quality, nutritive value, 1526
 - Serology, 3503
 - Size, 1527
 - Stem, 1527
 - Sterility, fertility, 3503, 5486
 - Sterility, male, 5150
 - Sterility, self, 7040
 - Thiocyanate, 1875, 5486
 - Varieties, 5361, 7037
 - Variety trials, 1494
- Brassica*. Kohl rabi
 - History and evolution, 7040
 - Plant collections, 2665
 - Sterility, self, 7040
 - Varieties, 2665, 5599
- Brassica*. Mustard, for oil
 - Fatty oil, 3623, 5463
 - γ rays, 2914
 - Genetics, 4788
 - Growth period, 4788
 - Hormones, 5627
 - Hybridization, interspecific, 5627
 - Mutation, induced, 2914, 3623, 5463
 - Varieties, 2915
- Brassica*. Rape
 - Breeding, 2916, 4789-90, 5498, 6734, 7037
 - Cytoplasmic inheritance, 2917-9
 - Erucic acid, 3756
 - Erysiphe*, 1865
 - Fatty oil, 1973, 3632
 - Genetics, 3756, 4793, 6482
 - Glucosides, 4793
 - Growth period, 3756
 - Hybrid varieties, 1875
 - Hybridization, interspecific, 5627, 6735
 - Isothiocyanates, 4790
 - Meiosis, 4789
 - Mutation, induced, 1753
 - Neutrons, 1753
 - Plasmodiophora*, 1865, 1875, 6482
 - Pollination, 251
 - Quality, nutritive value, 4416
 - Root, 6735
 - Seed, 1198
 - Shedding, 5506
 - Sowing, 1199
 - Statistics, genetics, 2916
 - Varieties, 1197, 1973, 2096, 2915, 2920, 4791-2, 6736-7
 - Variety trials, 195, 1196, 1975, 5506
- Brassica*. Sarson
 - Geographical races, 1846
 - Morphology, 6733
 - Quantitative characters, 1846
 - Selection, artificial, 3489
 - Sterility, fertility, 33489
 - Sterility, self, 6733
 - Taxonomy, 4787
 - Variation, 4787
- Brassica*. Sprouting broccoli
 - Flower, 5153
 - Genetics, 3285

Brassica: Sprouting broccoli—*continued*

History and evolution, 7040

Linkage, 3286

Quantitative characters, 3285

Sterility, self, 7040

Temperature, effect of, 5153

Variety trials, 1531

Brassica. Swede

Genetics, 3755, 6482

Hybridization, interspecific, 2666

Matrocliny, 6481

Plasmodiophora, 3755, 6482

Sterility, fertility, 6481

Varieties, 3755

Brassica. Turnip

Breeding, 4790

Combining ability, 3650, 5445

Development, 4548

Fatty oil, 3632

Genetics, 3650, 5445

Habit, 4548

Isothiocyanates, 4790

Phyllotreta, 1530

Plasmodiophora, 200, 3650, 5445

Varieties, 2091, 4547

Variety trials, 4545-6

Viruses, 2026

Bread fruit, *see Artocarpus*

Breeding, 184, 3474, 5438

Bremia

Lactuca. Lettuce, 1539, 5926

Physiological races, 5926

Brewing quality, *see quality*

Brinjal, *see Solanum*. Egg plant

Broccoli, heading, *see Brassica*

Broccoli, sprouting, *see Brassica*

5-Bromouracil, 108

Saccharomyces, 1721

Bromus

Breeding, 773, 4353, 4381

Chromosome aberrations, 1757

Chromosome number, 2559

Combining ability, 776

Fungi, 4381

Mutation, spontaneous, 4424

Pollination, 776-7

Polyploidy, 777

Quality, nutritive value, 5534

Rhizome, 4424

Sterility, fertility, 1757

Synthetics, 1968

Taxonomy, 777

Varieties, 774-5, 1964, 4425

Brussels sprouts, *see Brassica*

Buckwheat, *see Fagopyrum*

Bud failure

Prunus. Almond, 6869

Bud mutation, *see mutation*

Butter yellow

Allium. Onion, 5419

Byturus

Rubus. Raspberry, 2941

CABBAGE, *see Brassica*

Cacao, *see Theobroma*

Cadmium

Saccharomyces, 1731

Caffeic acid

Solanum. Potato, 5625

Caffeine

Allium. Onion, 1825

Cajanus

Gametocides, 7200

Hybridization, intergeneric, 1839

Pollination, 7199

Cajanus—*continued*

Sterility, male, 7200

Varieties, 1696

Calcium

Fragaria. Strawberry, 1355

Glycine. Soya bean, 1660, 7167

Hordeum. Barley, 645

Lycopersicon. Tomato, 5203

Phaseolus, 5269

Calonectria

Triticum. Wheat, 1978

Calyx, *see flower*

Camellia, *see Thea*

Canarium

Seed, 4977

Canary grass, *see Phalaris*

Candida

Gravity, 1711

Mutation, induced, 1711

Polyploidy, 1712, 5331

Riboflavine, 1711

Ultraviolet rays, 1711

Cannabis. Hemp

Adaptation, 6587

Breeding, 1038

Gibberellins, 4678

Growth period, 6587

Heterosis, 1041

Insects, 5840

Nitrogen, 2800-1

Photoperiodism, 2801

Plant collections, 1041, 2797, 4679

Quality, of fibre, 1040, 2799, 2802, 4679

Sex, 2799-801, 3822, 4678, 5478

Sowing, 6587

Stem, 5840

Varieties, 1039-40, 2798-9, 3684, 5478

Variety trials, 2797, 5507, 6586

Canning quality, *see quality*

Cantaloupe, *see Cucumis*

Capsaicin

Capsicum, 6728

Capsicum

Biochemistry, 6732

Breeding, 205, 2951

Capsaicin, 6728

Chromosome morphology, 2909

Colour, 1189

Combining ability, 2908

Fruit, 6727

Genetics, 1189, 6730

Growth period, 1964

Heterosis, 1190, 2908, 3331

Hybrid varieties, 234, 1498, 2906, 3635, 4827

Hybridization, 2905, 3246, 4826, 6724

Hybridization, graft, 2907

Meiosis, 2910

Phytophthora, 2905, 6730

Pollen, 1192

Pollination, 4828

Quality, nutritive value, 2906, 2912

Seed, 2911

Sterility, fertility, 4826

Sugar, 4829

Taxonomy, 2909

Variation, 6724

Varieties, 1191, 1500, 2908, 3253, 3821, 6725-6

Variety trials, 1188, 4825, 6732

Verticillium, 5715-6, 6731

Viruses, 206, 1189, 2004, 2905, 2913, 4830, 6731-2

Xanthomonas, 6729

Carbohydrates

Zea. Maize, 3627, 4100, 5479

Zea. Sweet corn, 3627

- Cardiazol
Allium. Onion, 5418
 Cardoon, *see* *Cynara*
Carica. Papaya
 Seed production, 1333
 Sex chromosomes, 1752
 Sterility, fertility, 1333
 Varieties, 3097
 Carob, *see* *Ceratonia*
 Carotene
 Ipomoea. Sweet potato, 6538
 β -Carotene
 Sorghum, 3624, 5464
 Carotenoids
 Daucus. Carrot, 200, 7022
 Lycopersicon. Tomato, 3638, 5200, 7097
 Zea. Maize, 2381
 Carpel, *see* flower
Carpophylus
 Zea. Sweet corn, 602
 Carrot, *see* *Daucus*
Carthamus. Safflower
 Breeding, 2932
 Colour, 1219
 Genetics, 1219, 1997, 4812
 Height, 4812
 History and evolution, 6758
 Hybridization, interspecific, 6758-9
 Nematodes, 2934
 Pollination, 1997
 Polyploidy, 6759
 Seed, 1220
 Sterility, fertility, 4812
 Varieties, 2933
Carya. Pecan
 Breeding, 4952
 Cladosporium, 4953
 Grafting, 4953
 Melanocallis, 1295
 Caryocinesis, *see* cell division
 Caryology, *see* nucleus
 Caryopsis
 Hordeum. Barley, 638, 1979, 6265
 Oryza. Rice, 4325
 Secale. Rye, 4092
 Sorghum, 686, 4279
 Triticum. Wheat, 402, 2177, 2193, 3980, 3993, 6042
 Zea. Maize, 530, 577, 2371, 2380-1, 6195
 Caryotype, *see* chromosome morphology
 Cassava, *see* *Manihot*. Casava
Castanea. Chestnut
 Dryocosmus, 3075, 4956
 Geographical races, 4955
 Phenols, 4956
 Pollination, 3076
 Varieties, 3075, 4954
 Xenia, 3076
 Castor oil plant, *see* *Ricinus*
 Catalase
 Beta. Sugar beet, 6635
 Catechol oxidase
 Zea. Maize, 3733
 Cauliflower, *see* *Brassica*
Ceiba. Kapok
 Quality, of fibre, 4669
 Celery, *see* *Apium*. Celery
 Cell, 1807
 Cell division, 154-5, 157, 1741, 1809, 3460, 3494, 3596,
 5355, 5412, 5417, 5421
 Allium, 174, 3599, 5419-20
 Allium. Onion, 1810-1, 1813, 5418
 Beta. Sugar beet, 4717
 Brassica. Brussels sprouts, 2941
 Butter yellow, 5419
 Cocos. Coconut, 6874
 Cell division—continued
 Glycine. Soya bean, 1646
 Helianthus. Jerusalem artichoke, 7030
 Hordeum. Barley, 628, 4239
 Malpighia, 4978
 Persea. Avocado, 6884
 Phaseolus, 7145
 Pisum. Pea, 19, 3416, 3598, 5310
 Saccharomyces, 3547, 7214
 Saccharum. Sugar cane, 2829
 Secale. Rye, 156, 2298, 6110
 Triticum. Wheat, 375-6, 3958, 6023, 6026
 Ustilago, 2437
 Vicia. Broad bean, 158-60, 1607, 1812, 1814, 3480,
 3581, 3597, 5415
 Vicia. Vetch, 156
 Zea. Maize, 3679
 Cell inclusions, 1741
 Triticum. Wheat, 375-6
 Cellulose
 Lolium, 3799
 Zea. Maize, 6180
Cenchrus
 Apomixis, 4444
 Biotypes, 4444
 Chromosome number, 4444
 Heat, drought resistance, 4418
 Polyploidy, 4444
 Variety trials, 4391, 4418, 6406
 Centres of origin
 Cucumis. Cucumber, 5181
 Cucumis. Melon, 5181
 Cucumis, minor species, 5181
 Triticum. Wheat, 456
 Vitis, 5020
 Zea. Maize, 6171
 Centromere, 5422
 Triticum. Wheat, 2215
Cephalosporium
 Physiological races, 592
 Zea. Maize, 592-3
Cerasus, *see* *Prunus*
Ceratis
 Prunus. Peach, 3048
Ceratocystis
 Coffea. Coffee, 6713
 Colour, 5931
 Crop plants, 5930-1
 Genetics, 5931
 Ipomoea. Sweet Potato, 2728, 4612, 6540
 Sex, 5931
 Sterility, fertility, 5930
 Theobroma. Cacao, 4772
 Ulmus. Elm, 1423, 3210, 5039, 5077, 6951
Ceratonia. Carob
 Variety trials, 6866
Cercospora
 Apium. Celery, 2004
 Beta, 3682
 Beta. Sugar beet, 1117, 1119, 5794, 5798, 6635, 6641-
 Daucus. Carrot, 5123
 Glycine. Soya bean, 1670
 Nicotiana, tobacco, 6652
 Phaseolus, 3371
 Physiological races, 6641-2
 see also *Mycosphaerella*
Cercospora
 Aegilops, 2148
 Cereals, 322
 Physiological races, 322
 Secale. Rye, 2148
 Triticum. Wheat, 2148, 2258
 Cereals
 Agriculture, 1746
 Biochemistry, 5957

Cereals—continued

- Botany, 1746
- Breeding, 194, 264, 283, 1746, 2117, 2126, 3745, 3858, 3864, 5495, 5943-4, 5947, 5956
- Cercospora*, 322
- Cold, effect of, 2086
- Cold resistance, 2086, 2143
- Cytoplasm, 2143
- Enzymes, 2136
- Erysiphe*, 2144, 5960
- Fungi, 3848
- γ rays, 2051
- Genetics, 2106
- Germination, 277-8, 3895
- Growth period, 5603
- Heterosis, 5948
- History and evolution, 3832
- Hybridization, 3889
- Irrigation, 283-4
- Land races, 2135
- Light, effect of, 3889
- Linkage, 3894
- Lodging, 5957
- Mutation, induced, 2051, 2086, 3867
- Neutrons, 2051
- Pathology, 3876, 5608
- Phosphorus, 2139
- Photoperiodism, 2135
- Piricularia*, 5658
- Plant collections, 284
- Pollen, 3897
- Pollination, 280, 3889
- Population genetics, 273
- Puccinia*, 286, 309, 321, 2106, 2146, 5961
- Quality, for milling and baking, 3880
- Quality, of edible product, 3899
- Quantitative characters, 3874
- Radiation, 282
- Soil, 2139
- Statistics, experimental designs, 2127, 3875
- Sterility, male, 5948
- Translocation, 3894
- Typhula*, 5962
- Uromyces*, 2146
- Ustilago*, 2106
- Varieties, 3891-2, 5518, 5603, 5950-2
- Variety trials, 266-7, 2120, 2123, 3858-63, 3874, 3888, 3892, 5941, 5945-6
- Vernalization, 2135
- Viruses, 1868
- Water balance, 250
- Yield, 282, 3879, 5956
- Chard, *see* Beta
- Chemicals, effect of, 123, 143-5, 1820
 - Allium*. Onion, 175, 1819
 - Aspergillus*, 3487
 - Citrus*. Lemon, 6855
 - Citrus*. Orange, 6855
 - Gossypium*. Cotton, 2064, 6560
 - Hordeum*. Barley, 115, 119, 141, 618, 2417, 3481, 3900, 4216, 6252
 - Lycopersicon*. Tomato, 1572
 - Oryza*. Rice, 3900
 - Piricularia*, 4336-7
 - Pisum*. Pea, 103, 1682, 1685, 2058, 3467, 3476, 3478
 - Saccharomyces*, 1720-1, 1731-2, 3453, 3453, 5333, 5336, 5339, 7222, 7228
 - Triticum*. Wheat, 109, 6023, 6040
 - Vicia*. Broad Bean, 141, 1605, 1613, 1896, 3481, 3607, 3609-10
 - Vitis*, 1374, 1896, 3176
 - Zea*. Maize, 2053, 4157, 6161
- Chemistry, *see* biochemistry
- Cherry, *see* *Prunus*
- Chestnut, *see* *Castanea*

Chiasma, *see* crossing over

Chickpea, *see* *Cicer*

Chicory, *see* *Cichorium*

Chilli, *see* *Capsicum*

Chilo

Oryza. Rice, 2115, 4291, 4345

Chilotraea

Saccharum. Sugar cane, 1069, 6618, 6619

Chionaspis

Populus. Poplar, 5072

Chimeras, 36

Brassica. Cabbage, 1522

Citrus. Grapefruit, 1289

Citrus. Orange, 4942

Ipomoea. Sweet potato, 3769

Pisum. Pea, 3478

Pome fruits, 4845

Poncirus, 4942

Pyrus. Pear, 4906

Solanum. Potato, 905

Sorghum, for grain, 6316

Thea. Tea, 4760

Triticum. Wheat, 2188

Chives, *see* *Allium*

Chlorella

Biotypes, 7206-7

Mutation, induced, 1698, 7205

Quality, nutritive value, 1699

X rays, 1698

Chloris

Heat, drought resistance, 4418

Polyploidy, 1903

Variety trials, 2554, 4418

Chloroambucil, 128

Chlorocholine chloride

Triticum. Wheat, 386, 458-9, 4042, 5487, 6033

Vicia. Broad bean, 3608

Chlorogenic acid

Nicotiana. Tobacco, 6660

Solanum. Potato, 936, 941

P-chloromercuribenzoic acid

Allium. Onion, 173

Chlorophyll

Avena. Oats, 4053

Hordeum. Barley, 32

Lycopersicon. Tomato, 5218

Medicago, 4487

Nicotiana. Tobacco, 6653, 6705

Pennisetum, for grain, 3490

Secale. Rye, 1754

Triticum. Wheat, 3976

Zea. Maize, 563, 4108, 4124, 5564, 6179, 6194

Chloroplasts, *see* plastids

Chromatin, *see* nucleus

Chromosome aberrations, 39, 116-7, 120, 157, 166, 172, 1820, 1824, 3604-5

Aegilops, 3992

Agropyron, 5988

Aleurites. Tung, 6752

Allium, 1818

Allium. Onion, 164, 173, 1508, 1819, 1822-3, 3264

Asparagus, 7035

Avena. Oats, 469

Brassica. Cabbage, 3278

Bromus, 1757

Cocos. Coconut, 1852, 3086

Coriandrum, 7201

Foeniculum, 5139

Glycine. Soya bean, 1652

Hordeum. Barley, 119, 629-31, 1817, 1821, 1855,

2415-8, 3481, 4230, 4232, 5424

Lactuca. Lettuce, 5160

Larix. Larch, 5048

Lycopersicon. Tomato, 3346

Nicotiana. Tobacco, 2087, 4752

Chromosome aberrations—continued

- Oryza*. Rice, 2528, 4291
- Pennisetum*, 657
- Phaseolus*, 3375
- Pinus*. Pine, 1474–5, 5094
- Pisum*. Pea, 103, 171, 1684–5, 3467, 5310, 7185, 7191
- Saccharomyces*, 1724–7, 3435–6
- Secale*. Rye, 346, 4081, 5988
- Solanum*. Potato, 903
- Sorghum*, for grain, 695
- Trifolium*. Red clover, 850
- Triticum*. Wheat, 121–2, 346, 349, 442, 2050, 2217–8, 2223, 3960–1, 3992, 5988, 6173
- Vicia*. Broad bean, 26, 33, 111, 113, 125, 165, 167–8, 170, 1608, 1814, 1817, 1896, 3479–81, 3491, 3597, 3603, 3606–10, 5404, 5426
- Zea*. Maize, 17, 545–7, 2001, 6172–4

Chromosome bridges

- Secale*. Rye, 2299

Chromosome fine structure, 1816, 1850, 5369–70

- Hordeum*. Barley, 4231
- Lycopersicon*. Tomato, 5201
- Mentha*, 5324
- Vicia*. Broad bean, 1606

Chromosome fragments, see aneuploidy

Chromosome maps, see linkage

Chromosome morphology,

- Aegilops*, 2214
- Agropyron*, 2606
- Areca*, 3084
- Avena*. Oats, 6098
- Capsicum*, 2909
- Citrus*, 1896
- Colchicum*, 1223
- Commelina*, 4816
- Conifers, 1466
- Corchorus*. Jute, 4683
- Dichanthium*, 800
- Dolichos*, 3389
- Festuca*, 1870, 2581, 6398
- Garuga*, 2938
- Grasses, 4414
- Hibiscus*, 4686
- Hordeum*. Barley, 4230
- Lolium*, 1870, 2581, 3594
- Melilotus*. Sweet clover, 871
- Nicotiana*. Tobacco, 3729
- Onobrychis*. Sainfoin, 4529
- Oryza*. Rice, 4315
- Phaseolus*, 5259, 5265
- Pinus*. Pine, 1473
- Saccharum*. Sugar cane, 2831
- Sambucus*. Elder, 3113
- Thelepogon*, 6404
- Thujopsis*, 6987
- Trifolium*. White clover, 858
- Triticum*. Wheat, 374, 2214, 6024–6
- Vicia*. Vetch, 2651
- Zea*. Maize, 544–5, 2366, 4164, 6170–1

Chromosome number, 3546

- Agropyron*, 457
- Beta*, 6476
- Bothriochloa*, 2587
- Bromus*, 2559
- Cenchrus*, 4444
- Coffea*. Coffee, 4769
- Commelina*, 1854, 4816
- Crop plants, 3592–3
- Crotalaria*, 4534
- Crotalaria*, for fibre, 1048
- Cymbopogon*, 2903
- Dactylis*, 1861
- Deschampsia*, 2600
- Dioscorea*. Yam, 4744
- Echinochloa*, 2451

Chromosome number—continued

- Edgeworthia*, 4690
- Erysiphe*, 2144
- Grasses, 4412–3, 6371
- Hemileia*, 4765
- Hibiscus*, 1050
- Linum*. Flax, 2795
- Lolium*, 4362
- Lotus*. Birdsfoot trefoil, 6473
- Lycopersicon*. Tomato, 24
- Malpighia*, 4978
- Medicago*, 828
- Palms, 1315
- Picea*. Spruce, 1483
- Pinus*. Pine, 6995
- Plantago*, 1224
- Poa*, 3825
- Prunus*. Plum, 2948
- Saccharum*. Sugar cane, 1066, 1947, 2830–1, 4701–2
- Solanum*, for fruit, 3356
- Triticeae*, 373
- Triticum*. Wheat, 373, 457
- Vigna*. Cowpea, 229
- Vitis*, 3166

Chromosome pairing, see Meiosis

Chromosome, sex, see sex

Chromosome substitution, 3611–3

- Aegilops*, 2218
- Agropyron*, 443, 2219, 3686, 3931
- Lycopersicon*. Tomato, 7109
- Triticum*. Wheat, 413, 429, 443, 1973, 1999, 2219, 2235, 3686, 3931, 4038, 5983

Chromosome supernumerary, see aneuploidy

Chrysanthemum, as insecticide

- Breeding, 6771
- Hybridization, 2033
- Pyrethrins, 6771
- Cicer*. Chickpea
- Ascochyta*, 5317–8, 5733
- Genetics, 5315, 7197
- Hybridization, interspecific, 3423
- Mutation, 3424
- Polyploidy, 3424
- Varieties, 1896, 5316, 5522
- Variety trials, 3422
- Yield, 7198
- Zineb, 5318

Cichorium. Chicory

- Apomixis, 1236
- Breeding, 1543
- Flower, 7065
- Hybridization, interspecific, 1887
- Pellicularia, 3701
- Rhizopus*, 7066
- Sclerotinia*, 3701
- Sterility, fertility, 7065

Cichorium. Endive

- Biotypes, 3298
- Growth period, 3298
- Hybridization, interspecific, 1887
- Sterility, fertility, 3298
- Variety trials, 1536

Cider, see quality

Cinchona

- Breeding, 4831
- Cinnamomum*. Cinnamon
- Essential oil, 1187
- Cinnamon, see *Cinnamomum*
- Citric acid

Aspergillus, 1710

- Vitis*, 3139
- Citron, see *Citrus*
- Citrullus*. Water melon
- Colchicine, 5170
- Colour, 1545

Citrullus. Water melon—continued

- Genetics, 2007
- Glomerella*, 1548
- Hermaphroditism, 1547
- Hybrid varieties, 1545, 5169, 7079
- Hybridization, 3245, 5117
- Hybridization, interspecific, 1546
- Leaf, 1545
- Pollination, 3245, 5171
- Polyploidy, 5170–1, 7078–9
- Sterility, fertility, 1547
- Sterility, male, 5171
- Varieties, 1546, 3311, 7077
- Variety trials, 3309–10

Citrus

- Alternaria*, 4939
- Anatomy, 1288
- Breeding, 1286, 1844
- Chromosome morphology, 1896
- Cold resistance, 1288, 3060, 6853
- Diplodia*, 3062
- Essential oil, 3063
- History and evolution, 1896
- Hybridization, 4938
- Hybridization, intergeneric, 3063
- Mutation, induced, 3060
- Parthenocarp, 3059
- Penicillium*, 6854
- Phytophthora*, 3061–2
- Pollen, 6852
- Polyembryony, 4866
- Quality, of edible product, 3057
- Sterility, fertility, 3059, 6852
- Sterility, self, 3059
- Varieties, 1287, 3058
- Viruses, 208
- X rays, 3060
- See also *Poncirus*

Citrus. Grapefruit

- Chimeras, 1289
- Genetics, 1289

Citrus. Lemon

- Chemicals effect of, 6855
- Cold resistance, 6857
- Deuterophoma*, 5785–6
- Development, 6857
- Mutation, somatic, 2079, 6855
- Mutation, spontaneous, 3477
- Quality, of edible product, 2079
- Shellbark, 3064

Citrus. Mandarin

- Hybridization, interspecific, 3056, 6856
- Quality, for storage, 4943
- Varieties, 3058

Citrus. Orange

- Biochemistry, 4940
- Chemicals effect of, 6855
- Chimeras, 4942
- Mutation, somatic, 6855
- Parthenocarp, 4941
- Polyembryony, 4941
- Segregation, 4942
- Varieties, 3056, 4940

Cladosporium

- Carya*. Pecan, 4953
- Cucumis*. Cucumber, 5717
- Lycopersicon*. Tomato, 1588–9, 2106, 5229, 5538, 5926, 7119

Classification, see taxonomy

Claviceps, 7213

- Sorghum*, for grain, 2474
- Ultraviolet rays, 7212

Cleistogamy

- Hordeum*. Barley, 634

Climate

- Arachis*. Groundnut, 3752
- Avena*. Oats, 5963
- Crop plants, 1744–5
- Dactylis*, 2028
- Ficus*. Fig, 6858
- Fruit crops, 2956, 4872
- Hordeum*. Barley, 6237
- Lycopersicon*. Tomato, 3330
- Nicotiana*. Tobacco, 1156
- Oryza*. Rice, 1848
- Phalaris*, 5570
- Prunus*. Plum, 2956
- Thea*. Tea, 6708
- Trifolium*. White clover, 5578
- Triticum*. Wheat, 2243, 3967, 3988, 5363, 5963, 6032
- Vitis*, 3171–2, 6936
- Zea*. Maize, 5515

Clines

- Picea*. Spruce, 3233

Clover, see *Melilotus* and *Trifolium*

Cob, see *Corylus*

Coccomyces

- Prunus*. Cherry, 5781

Cochlearia, see *Armoracia*

Cochliobolus

- Agrostis*, 4408
- Avena*. Oats, 2004, 2130, 6101
- Eleusine*, 661, 6305
- Hordeum*. Barley, 1973, 4252
- Oryza*. Rice, 738, 4291
- Triticum*. Wheat, 2257, 3756, 6060
- Zea*. Maize, 584–5, 5527

Cocksfoot, see *Dactylis*

Cocoa, see *Theobroma*

Coconut, see *Cocos*

Cocos. Coconut

- Breeding, 1321–2, 1327, 3087–8, 5364
- Cell division, 6874
- Chromosome aberrations, 1852, 3086
- Colour, 1320, 1328, 4972
- Endosperm, 1852
- Flower, 3090
- Fruit, 3091
- Fungi, 1325
- Genetics, 1320, 1328, 3092, 4972
- Helminthosporium*, 205, 3087
- Hybridization, 205, 3086
- Lethal yellowing, 1330, 3092
- Meiosis, 3085
- Pathology, 5364
- Plant collections, 3092, 5364
- Pollen, 1318, 1329
- Pollination, 6875
- Selection, artificial, 1319
- Sterility, male, 3086
- Taxonomy, 3087, 5364
- Varieties, 3089
- Variety trials, 1317, 2027
- Viruses, 1322–4

Coffea. Coffee

- Breeding, 1163, 4767, 6701
- Ceratocystis*, 6713
- Chromosome number, 4769
- Colchicine, 2892
- Endosperm, 1165
- Glomerella*, 2894, 4771, 6701
- Hemileia*, 2892, 2894, 4765, 4771, 6712, 6714–6
- History and evolution, 6712
- Hybridization, interspecific, 1164–5, 2892, 4765, 6712
- Meiosis, 1164, 2892
- Morphology, 6713
- Nematodes, 1166
- Plant collections, 4765
- Pleiotropy, 6713

Coffea. Coffee—continued

- Polyploidy, 1165, 2892, 6712
- Quality, of edible product, 2893, 3751
- Seed, 2893
- Taxonomy, 4770
- Variety trials, 1161–2, 4766, 4768
- Yield, 2023

Coffee, *see Coffea*

Coix

- Density of stand, 4348
- Genetics, 4347
- Height, 4347
- Mixtures of crops or genotypes, 4348
- Morphology, 6370
- Plant collections, 6370
- Variation, 6370

Cola

- Breeding, 1952

Colchicine, 5421, 5428

- Chromosome morphology, 1223
- Citrullus*. Water melon, 5170
- Coffea*. Coffee, 2892
- Cuminum*. Cumin, 2902
- Dolichos*, 7157
- Lolium*, 3492, 6387
- Melilotus*. Sweet clover, 873
- Populus*. Poplar, 1455–6
- Secale*. Rye, 270
- Solanum*. Potato, 2696
- Sorghum*, for grain, 681
- Thea*. Tea, 4760
- Ulmus*. Elm, 5075
- Vicia*. Broad bean, 113, 160, 1812, 3365
- Zea*. Maize, 6177
- Essential oil plants, 4824

Cold, effect of

- Cereals, 2086
- Fragaria*. Strawberry, 1352
- Saccharum*. Sugar cane, 1067
- Vitis*, 3148, 3177
- Zea*. Maize, 519, 2371, 2373, 5488–9

Cold resistance

- Apium*. Celery, 7064
- Avena*. Oats, 472–4, 1875, 3786
- Brassica*. Cauliflower, 7051
- Brassica*. Kale, 1528
- Cereals, 2086, 2143
- Citrus*, 1288, 3060, 6853
- Citrus*. Lemon, 6857
- Crop plants, 3846
- Cucumis*. Cucumber, 5184
- Dactylis*, 200
- Festuca*, 1873, 3787
- Ficus*. Fig, 1291
- Fragaria*. Strawberry, 1961, 3131, 5536
- Fruit crops, 6788–9
- Glycine*. Soybean, 5291
- Grasses, 756
- Hordeum*. Barley, 425, 1964, 2434, 4251, 6271
- Juglans*. Walnut, 1299
- Lupinus*. Lupin, 4372, 4396–7
- Malus*. Apple, 1256–8, 2076, 2962, 2991, 4888, 4901–2, 6814
- Medicago*, 220, 835, 4470, 4504, 5558, 5575, 6433
- Oryza*. Rice, 4331
- Pennisetum*, for grain, 4259
- Phaseolus*, 4866
- Pinus*. Pine, 3228, 5102
- Pisum*. Pea, 3421
- Populus*. Poplar, 5070–1, 6952
- Prunus*. Almond, 3693, 4959
- Prunus*. Apricot, 3018
- Prunus*. Cherry, 2948, 3039
- Prunus*. Peach, 1965, 3054–5, 3776
- Prunus*. Plum, 1277, 4920, 6842

Cold resistance—continued

- Pseudotsuga*. Douglas fir, 5052
- Pyrus*. Pear, 1256, 2962, 6825–7
- Rubus*. Raspberry, 1973
- Saccharum*. Sugar cane, 2848, 4704, 6614
- Salix*. Willow, 6952
- Secale*. Rye, 488
- Setaria*, 4409
- Solanum*. Potato, 886, 2668–9, 2685, 2713–4
- Thea*. Tea, 4763–4, 6710
- Trifolium*. Red clover, 853
- Trifolium*. White clover, 4518
- Triticum*. Wheat, 193, 423–7, 1985, 2043, 2248, 3975
- 4002–10, 6026, 6041, 6053–6
- Vicia*. Vetch, 1887, 4524, 6460
- Vitis*, 1373, 3196–200, 5032, 6944–5
- Zea*. Maize, 523, 581–2, 2371, 4127, 4185–8

Collections, plant, *see* plant collections

Colletotrichum

- Corchorus*. Jute, 1927, 2806
- Cucumis*. Melon, 5721
- Hibiscus*, 1051
- Phaseolus*, 200, 1629, 3385, 5275–6, 5580, 7152
- Physiological races, 1628, 2849, 5275, 5580
- see also Glomerella*

Colour, 79

- Agropyron*, 2609, 5983
 - Allium*. Onion, 5128
 - Arachis*. Groundnut, 3081
 - Asparagus*, 1516, 7034
 - Avena*. Oats, 4076
 - Beta*. Sugar beet, 1085, 1100
 - Brassica*. Brussels sprouts, 1532
 - Brassica*. Cabbage, 1522, 1806
 - Capsicum*, 1189
 - Carthamus*. Safflower, 1219
 - Ceratocystis*, 5931
 - Citrullus*. Water melon, 1545
 - Cocos*. Coconut, 1320, 1328, 4972
 - Corchorus*. Jute, 6589
 - Coriandrum*, 7202
 - Crop plants, 3639
 - Daucus*. Carrot, 7022
 - Glycine*. Soybean, 1644, 1646, 5289
 - Gossypium*. Cotton, 982, 1921, 2761, 6429
 - Helianthus*. Sunflower, 1209, 2929
 - Hibiscus*, as vegetable, 5238
 - Hordeum*. Barley, 638, 2081, 4213, 6240
 - Leguminous forage crops, 4455
 - Lycopersicon*. Tomato, 1964, 3329, 5538
 - Malus*. Apple, 1262, 4882
 - Medicago*, 823, 4483
 - Musa*. Banana, 1363
 - Nicotiana*. Tobacco, 1128, 2870
 - Oryza*. Rice, 1953
 - Papaver*. Poppy, 6721
 - Pennisetum*, for grain, 6290
 - Phaseolus*, 3384, 3686, 5257
 - Pisum*. Pea, 97, 1681
 - Pyrus*. Pear, 1262, 1964
 - Rubus*. Raspberry, 3101, 6887
 - Secale*. Rye, 4080, 4092
 - Solanum*. Egg plant, 7126
 - Solanum*. Potato, 2943, 6493
 - Thea*. Tea, 2891
 - Theobroma*. Cacao, 2020
 - Triticum*. Wheat, 1990, 5983, 5997, 6129
 - Vicia*. Broad bean, 3240, 5251
 - Vitis*, 3150, 3172, 5028, 5036
 - Zea*. Maize, 28, 2312–3, 2315–6, 2351–2, 2380–1, 2393
 - 3471, 3498, 4106, 6130
 - Zea*. Sweet corn, 599
- Colza, *see Brassica*
- Combining ability
- Beta*. Sugar beet, 1083

Combining ability—*continued*
Betula. Birch, 3221
Brassica. Turnip, 3650, 5445
Bromus, 776
Capsicum, 2908
Cucumis. Cucumber, 5178, 7088
Fragaria. Strawberry, 4993
 Grasses, 4410
Hordeum. Barley, 2402
Leucaena, 4409, 5079
Linum. Linseed, 4799, 6747-8
Lycopersicon. Tomato, 3330, 5197, 7100
Medicago, 825, 2616, 4359, 5486, 6424-5, 6430-1, 6435
Nicotiana. Tobacco, 1132, 4747
Secale. Rye, 200, 2296
Sorghum, 676-7, 1916, 4270, 6315
Trifolium. Minor species, 2648
Trifolium. White clover, 859
Triticum. Wheat, 2173, 2175, 3924, 6039
Vicia. Broad bean, 3363, 7132
Zea. Maize, 531, 2334-7, 2364, 4170, 6170, 6185

Commelina
 Chromosome morphology, 4816
 Chromosome number, 1854, 4816
 Crossing over, 1854
 Polyploidy, 1854
 Taxonomy, 1854, 4816

Compatibility, *see* sterility, fertility

Competition
Cryptomeria, 3732
 Forest trees, 5062
Glycine. Soya bean, 1663
Oryza. Rice, 4291, 6361
Sorghum, for grain, 689
Trifolium. Subterranean clover, 862
Triticum. Wheat, 4001, 5486
Zea. Maize, 6208

Complementary genes, *see* multiple genes

Complementation, 7, 76
Saccharomyces, 3442, 7218

Complex loci, 7
Zea. Maize, 3675

Conifers
 Chromosome morphology, 1466

Conotelus
Zea. Sweet corn, 602

Conserving quality, *see* quality

Cooking quality, *see* quality

Copper
Malus. Apple, 4900, 5768
Saccharomyces, 1732

Corchorus. Jute
 Aminoacids, 1044
 Breeding, 2803
 Chromosome morphology, 4683
Colletotrichum, 1927, 2806
 Colour, 6589
 γ rays, 6588
 Genetics, 4680-1
 History and evolution, 1045
 Hybridization, 4684
 Hybridization, interspecific, 1042-3, 1938-40, 2804-5, 4680, 4685, 6588
 Lodging, 2803
Macrophomina, 2803
 Meiosis, 2804
 Mutation, induced, 1044, 4682
 Mutation, spontaneous, 4681
 Nitrogen, 6590
 Phenols, 4680
 Pollen, 1045
 Pollination, 4684-5
 Polyploidy, 2805, 6589
 Taxonomy, 1046, 4683
 Toxic soils, 6591

Corchorus. Jute—*continued*
 Varieties, 2806
 X rays, 2803, 4682, 4684
 Coriander, *see* *Coriandrum*

Coriandrum
 Chromosome aberrations, 7201
 Colour, 7202
 Essential oil, 5326
 Genetics, 7202
 Height, 7202
 Mutation, induced, 7201
 Plant collections, 5156
 Radiation, 7201
Ramularia, 5326

Cork
Pinus. Pine, 1415
See also quality

Corn, *see* cereals, *Hordeum*, *Triticum* and *Zea*

Cornus
 Taxonomy, 3485

Corolla, *see* flower

Corticium
Oryza. Rice, 2545

Corylus. Hazel
 Breeding, 4958
 Hybridization, 3077, 4957
 Miçurinism, 4957
 Sterility, fertility, 3077
 Varieties, 4958, 6868

Corynebacterium
Fragaria. Strawberry, 5790
 History and evolution, 6436
Lycopersicon. Tomato, 205, 3353
Medicago, 6434-6
Onobrychis. Sainfoin, 5887
 Physiological races, 5867
Solanum. Potato, 2713, 5867

Costelytra
Lolium, 6392

Cotton, *see* *Gossypium*

Couch, *see* *Agropyron*

Coumarin
Melilotus. Sweet clover, 2658, 4370, 4456

Coumestrol
Medicago, 837

Cowpea, *see* *Vigna*

Crab grass, *see* *Digitaria*

Crambe
 Variety trials, 1195

Cranberry, *see* *Oxycoccus*

Crataegus
 Heat, drought resistance, 6832
 History and evolution, 6831
 Polyploidy, 6831

Crimson clover, *see* *Trifolium*

Cronartium
Pinus. Pine, 1409, 1411, 1414-5, 1427, 1431-2, 1434, 3777, 5103, 6986, 7002

Crop plants
 Agriculture, 1745
Alternaria, 5933
 Apomixis, 1828, 5585
 Bacteria, 5622
 Biochemistry, 5620
 Breeding, 190-2, 202, 204, 209, 211, 215, 226, 230-3, 256, 262, 1424, 1743, 1886, 1949, 1982, 2012, 2025, 2030, 2034, 3513, 3620, 3642, 3651, 3655-6, 3678, 3687, 3690-2, 3698, 3701-2, 3704, 3757, 3803-7, 3842, 4843, 5360, 5437, 5448, 5452-3, 5480, 5494-7, 5499, 5512-3, 5519, 5521, 5537, 5583-5, 5587-91, 5937
Ceratocystis, 5930-1
 Chromosome number, 3592-3
 Climate, 1744-5
 Cold resistance, 3846

Crop plants—*continued*

Colour, 3639
 Cytology, 5584
 Cytoplasmic inheritance, 3852
Ditylenchus, 3682
 Embryology, 5362
 Enzymes, 5626, 5843
Erysiphe, 2107
 Ethyleneimine, 247, 5597
 Evolution, general theory, 5583
 Fertilization, sexual, 1838
 Fungi, 5841
 γ rays, 3814
 Genetics, 252, 2035–6, 2107, 3468, 5621
 Growth period, 2098
 Harvesting, 5482
 Heat, drought resistance, 2104, 3847
 Heterosis, 235, 1838, 2104, 3810, 5877, 6009
 History and evolution, 253, 1830, 3833, 7237
 Hybrid varieties, 235, 3827
 Hybridization, interspecific, 2038
 Insects, 261–2, 5632
 Legislation, 233, 246, 2103, 3805–7, 4843, 5937
 Micurinism, 3824
 Mutation, 3639
 Mutation, induced, 137, 237–9, 247, 2039–40, 2088, 3468, 3521, 3523, 3813–4, 5596–7, 5634
 Neutrons, 5592
 Nucleus, 3685
 Nutrients, 5607
 Nucleic acids, 253
 Pathology, 256, 1424, 3834, 3844, 5609, 5619–21, 5624, 5626, 5633–4, 5842–3, 5846–7, 5875–7, 5889, 5924, 5927
Pellicularia, 5932
 Photoperiodism, 1863
 Plant collections, 254, 3765, 3829–31, 3836–43, 3884, 5586, 5605
 Pollen, 3827
 Pollination, 3824
 Polyploidy, 248, 1976, 4363, 5440, 5601
Pseudomonas, 5928
 Quality, 5480, 5604
 Quality, nutritive value, 5467
 Quality, of edible product, 3619, 3828, 5461
 Quantitative characters, 3651, 3655, 5447–8, 5452
 Radiation, 137, 239, 1801, 1976, 2088, 5591
 Root, 2099
 Seed production, 255, 2102–3
 Seedlings, 2099
 Selection artificial, 2089–90, 4351, 4363
 Selection natural, 2108
 Sex, 249, 1805, 5877
 Sowing, 5482
 Statistics, 2034
 Statistics, experimental designs, 3809
 Statistics, genetics, 3651, 3808, 5447–8
 Sterility, male, 235
 Sterility, self, 252
 Sugar, 2098
 Taxonomy, 3616, 5362
 Variation, 4351, 5623
 Varieties, 219, 241–2, 246, 2040, 2094, 3816–9, 3821, 3843, 5520, 5598
 Variety trials, 185, 196–7, 199, 210, 217, 219, 227, 1880, 1885, 1951, 1967, 1974, 2006, 2010, 3680, 3689, 3743, 3778, 3780–5, 5483–4, 5503, 5535, 5539–42, 5586
Verticillium, 260, 3852–3
 Viruses, 2108–9, 3656, 5453, 5631, 5936
 Crossing, *see* hybridization
 Crossing over, 22, 25, 42, 5375
Avena, Oats, 1879
Commelina, 1854
Festuca, 6395
Lolium, 781

Crossing over—*continued*

Secale, Rye, 1815, 3679
Zea, Maize, 547
Crotalaria
 Chromosome number, 4534
 Hybridization, interspecific, 6471
 Monocrotaline, 4822
Crotalaria, for fibre
 Chromosome number, 1048
 Meiosis, 1049
Meloidogyne, 5935
 Mutation, induced, 1047
 X rays, 1047
Cryptomeria
 Competition, 3732
 Nutrients, 5089
Cryptorhynchus
Populus, Poplar, 5072
 Cucumber, *see Cucumis*
Cucumis, Cucumber
 Biochemistry, 3323
 Breeding, 3321, 7090
 Centres of origin, 5181
Cladosporium, 5717
 Cold resistance, 5184
 Combining ability, 5178, 7088
 2,3-Dichloroisobutyrate sodium, 1555
 Genetics, 3322, 5181, 7086–7
 Germination, 5184
 Gibberellins, 3324
 Glass, cultivation under, 7088
 Grafting, 5182
 Growth period, 5594, 7088
 Harvesting, 5183
 Heterosis, 3243, 3318, 3331
 Hybrid varieties, 1496, 1553, 3299, 3317, 3635, 3810, 5177, 7016
 Hybridization, 3246, 3248
 Hydroponics, 5186
 Inbreeding, 3319
Oidium, 5723
 Parthenocarp, 2007, 5178, 7089
 Pathology, 7090
Peronospora, 5724
 Seed production, 3299, 7089
 Sex, 3320–4, 3822, 5182–3, 5594, 7086–7
 Size, 5178
 Stem, 5183
 Sterility, fertility, 7089
 Sterility, male, 1555
 Varieties, 1554, 3241, 3251, 3253, 3755, 5179–80
 Variety trials, 1563, 3247–8, 3315–6, 5175–6, 5510, 7085–6
 Viruses, 5185
Cucumis, Melon
 Breeding, 1544, 5164
 Centres of origin, 5181
Colletotrichum, 5721
Erysiphe, 2005, 5167
 Flower, 7074
 Fruit, 5165
 γ rays, 2075
 Genetics, 3305, 5167, 5181, 7072
 Heat, drought resistance, 3306
 Height, 1544
 Heterosis, 3331
 History and evolution, 3307
 Hybrid varieties, 3303–6
 Hybridization, 3302
 Hybridization, graft, 5165
 Mutation, induced, 2075, 3477
 Mutation, spontaneous, 7070
Mycosphaerella, 3308
 Phosphorus, 5161
 Plant collections, 3307, 7076

- Cucumis*. Melon—continued
Pseudoperonospora, 2005
 Quality, for storage, 7075
 Quality, nutritive value, 3306
 Seed, 2075
 Sex, 3305, 3822, 7072
 Taxonomy, 3307
 Varieties, 3306, 5166, 7071
 Variety trials, 1563, 3244, 3301, 7075
 Vegetative reproduction, 7073
- Cucumis*. Minor species
 Centres of origin, 5181
 Genetics, 5181
 History and evolution, 7091
 Polyploidy, 7091
- Cucurbita*
 Breeding, 7082
 Fatty acids, 7083
 Fruit, 5165
 Fungi, 5163
 Hybridization, graft, 5165
 Hybridization, interspecific, 1551, 7081, 7083
Hypomyces, 5173
 Inbreeding, 7080
 Meiosis, 7081
 Polyploidy, 7081
 Quality, of edible product, 7080, 7082
 Seed, 1551
 Texture, 1551
 Varieties, 1550, 3314, 5172
 Variety trials, 3312–3
- Cucurbits*
 Genetics, 7069
 Hybridization, interspecific, 5593
Hypomyces, 3300, 7068
 Insects, 7069
 Pathology, 5162
 Plant collections, 4458
 Pollination, 7067
 Sterility, male, 2004
 Varieties, 5162
- Cultivars, *see* varieties
 Cumin, *see* *Cuminum*
- Cuminum*. Cumin
 Colchicine, 2902
 Pollination, 6760
 Polyploidy, 2902
- Currant, *see* *Ribes*
 Currant, *see* *Vitis*
- Cuttings
Prunus. Almond, 3078
Prunus. Plum, 4918
Ribes. Gooseberry, 4989
- Cyamopsis*
 Cytology, 4542
 Gum, 1911–2
 Taxonomy, 4542
 Variety trials, 1913–4
- Cyanogenetic compounds
Lotus. Birdsfoot trefoil, 2662, 3679, 4536, 6472
Manihot. Cassava, 1120
Sorghum, for grain, 4281
Trifolium. White clover, 859
- Cycloheximide,
Pisum. Pea, 19
Saccharomyces, 7220
- Cydonia*. Quince
 Breeding, 1267
 Grafting, 1267, 6830
Mycosphaerella, 6830
 Pollination, 6829
 Sterility, fertility, 6829
 Variety trials, 3012
- Cylindrocapturus*
Pinus. Pine, 1426
- Cymbopogon*
 Chromosome number, 2903
 Essential oil, 4823
 History and evolution, 2903
 Polyploidy, 4823
- Cynara*. Cardoon
 Habit, 3271
 Land races, 3271
- Cynodon*
 Aneuploidy, 768
 Genetics, 772
 Hybrid varieties, 3759
 Hybridization, interspecific, 767
 Meiosis, 769
 Mixtures of crops or genotypes, 6379
 Polyploidy, 767, 769
Puccinia, 6380
 Quality, nutritive value, 770
 Root, 6378
 Sterility, fertility, 769
 Taxonomy, 771
 Variety trials, 2569
 Yield, 772
- Cyperus*
 Germination, 4689
 Temperature effect of, 4689
- Cytochrome
Saccharomyces, 1730
- Cytology, 22, 182, 1742, 5354, 5411, 5436
Agropyron, 2180
Allium, 5135
Allium. Onion, 3591
 Crop plants, 5584
Cyamopsis, 4542
Festuca, 2578, 2581, 4434
Glycine. Soya bean, 2029
Guadua, 809
Humulus. Hop, 1182
Indigofera, 4542
 Leguminous forage crops, 6415
Leucaena, 6981
Solanum. Potato, 2701
Sorghum, for grain, 6314
Triticum. Wheat, 2180, 6023
- Cytomixis, 1814
Gossypium. Cotton, 4632
- Cytoplasm
 Cereals, 2143
- Cytoplasmic inheritance, 66, 78–9, 1791–2, 1826, 3504, 3572–3, 3686, 5405
Aegilops, 3705–6
Beta. Mangel, 6478
Beta. Sugar beet, 1106, 6478
Brassica. Rape, 2917–9
 Crop plants, 3852
Daucus. Carrot, 2941
Gossypium. Cotton, 4628
Lolium, 4355
Nicotiana. Tobacco, 20, 2873, 6650, 6655
Oryza. Rice, 4321
Pinus. Pine, 6991
Prunus. Plum, 3671, 5476
Saccharomyces, 1722, 3449, 5344
Solanum. Potato, 6497
Triticum. Wheat, 398, 3705–6
Zea. Maize, 536, 585, 1834, 2343–4, 2377, 2380, 4149, 6123, 6192
- Cytospora*
Prunus. Apricot, 5778
- 2,4-D
Gossypium. Cotton, 992
Solanum. Potato, 946

Dactylis

- Aneuploidy, 1879
- Breeding, 2028
- Chromosome number, 1861
- Climate, 2028
- Cold resistance, 200
- Density of stand, 4375
- Development, 1863
- Flower, 766
- Genetics, 4358, 4420
- Growth period, 2032, 4419-20, 6372
- Habit, 1873, 4419
- Heterosis, 4375
- Irrigation, 2028
- Meiosis, 1756
- Mixtures of crops or genotypes, 6375
- Nitrogen, 2565
- Photoperiodism, 766, 1863
- Photosynthesis, 1873
- Polyploidy, 1879
- Quality, nutritive value, 1866, 4358
- Quantitative characters, 4419-20
- Scolecotrichum*, 6375
- Statistics, genetics, 4420
- Sterility, male, 1964, 2567, 5534
- Synthetics, 766
- Temperature, effect of, 1873
- Variation, 4419-20
- Varieties, 764-5, 2566, 6372
- Variety trials, 2565, 5552

Dandelion, *see Taraxacum*, for rubber

Dasyneura

- Ribes*, Black currant, 3106

Daucus, Carrot

- Breeding, 1964, 5538
- Carotenoids, 200, 7022
- Cercospora*, 5123
- Colour, 7022
- Cytoplasmic inheritance, 2941
- Flower, 7025
- Genetics, 5123, 7022
- Heterosis, 3331
- Inbreeding, 7024
- Meiosis, 2941
- Pollination, 7024
- Quality of edible product, 3258-9
- Sex, 7023
- Sterility, male, 1964, 2941, 7025
- Taxonomy, 3260
- Temperature, effect of, 7023
- Tissue culture, 5122
- Varieties, 224, 2091-2, 3252, 3258, 3260, 5121
- Variety trials, 1502, 5120, 7021
- Viruses, 2941

DDT

- Hordeum*, Barley, 6238

Defoliation

- Fragaria*, Strawberry, 2941
- Solanum*, Potato, 3845

Deletion, *see* translocation

Dendroctonus

- Pinus*, Pine, 1416-7

Density of stand

- Avena*, Oats, 474
- Coix*, 4348
- Dactylis*, 4375
- Grasses, 4352
- Hordeum*, Barley, 6270
- Lolium*, 6391
- Lotus*, Birdsfoot trefoil, 6474
- Medicago*, 2616, 3668-9, 5473-4
- Oryza*, Rice, 713, 6358-60
- Phaseolus*, 3384
- Triticum*, Wheat, 422, 2155, 4000
- Zea*, Maize, 521, 1981, 2384-5, 4126, 4182, 6182, 6206-7

2-Deoxyadenosine

- Tuber plants, 3602

Deschampsia

- Apomixis, 2600
- Chromosome number, 2600
- Vivipary, 2600

Designs, experimental, *see* statistics

Desmodium

- Hybridization, interspecific, 2029

Desynapsis, *see* asynapsis

Deterioration during storage, *see* quality

Deuterophoma

- Citrus*, Lemon, 5785-6

Development

- Brassica*, Turnip, 4548
- Citrus*, Lemon, 6857
- Dactylis*, 1863
- Festuca*, 1863
- Fragaria*, Strawberry, 1352, 3686, 4847
- Gossypium*, Cotton, 6570, 6581
- Hordeum*, Barley, 616, 2423, 4209, 4255
- Larix*, Larch, 3235
- Lolium*, 1863, 1873, 6390
- Malus*, Apple, 1242, 1252-3, 2979
- Nicotiana*, Tobacco, 3731, 6677
- Oryza*, Rice, 16, 2530, 2532, 3724, 3727
- Picea*, Spruce, 5106
- Pinus*, Pine, 1476, 5095, 6994
- Pisum*, Pea, 7191
- Populus*, Poplar, 3217
- Prunus*, Plum, 1276
- Pseudotsuga*, Douglas fir, 5052
- Psidium*, Guava, 4947
- Pyrus*, Pear, 1242
- Saccharum*, Sugar cane, 4703
- Solanum*, Potato, 916, 5926
- Sorghum*, for grain, 682
- Theobroma*, Cacao, 1172, 3751, 4777
- Triticum*, Wheat, 386, 551, 2224, 2239, 3917, 3990, 5546, 5955
- Vicia*, Vetch, 6460
- Vitis*, 1375
- Zea*, Maize, 272, 526, 550, 4137, 4168, 5955, 6153, 6180

Development, abnormal

- Lycopersicon*, Tomato, 7106

- Melilotus*, Sweet clover, 6467

- Nicotiana*, Tobacco, 1128, 3675

- Pastinaca*, Parsnip, 1882

- Pisum*, Pea, 1677

- Triticum*, Wheat, 436, 5547, 5563, 6033

- Vicia*, Vetch, 866

- Vitis*, 1380

- Zea*, Maize, 498, 3495, 6183

Dewberry, *see Rubus*

Diabrotica

- Arachis*, Groundnut, 2002, 4970

Diacetyl

- Streptococcus*, 5328

Diatraea

- Saccharum*, Sugar cane, 4707

Diazo compounds

- Allium*, 5419

Diazouracil

- Allium*, 1813

Dichanthium

- Chromosome morphology, 800
- Essential oil, 6402
- History and evolution, 4438
- Hybridization, intergeneric, 799
- Hybridization, interspecific, 799, 4438
- Photoperiodism, 4439
- Polyploidy, 4438
- Sterility, male, 4439
- Taxonomy, 6402

p-Dichlorobenzene, 5425

2,3-Dichloroisobutyrate, sodium

- Beta.* Mangel, 6480
- Cucumis.* Cucumber, 1555
- Glycine.* Soya bean, 1654
- Sorghum, 2468

2,4-Dichlorophenoxyacetic acid

- Zea.* Maize, 597

Didymascella

- Thuja*, 1406

Didymella

- Pisum.* Pea, 5717
- Rubus.* Raspberry, 4980

Dieldrin, 5427

Diepoxybutane

- Vicia.* Broad bean, 125

Diethyl sulphate

- Avena.* Oats, 2130
- Hordeum.* Barley, 2130, 2416
- Zea.* Maize, 3496

Differentiation, *see* development

Digitalis

- Breeding, 6763
- Digitoxin, 6763
- Hybridization, interspecific, 4820
- Selection, artificial, 6763

Digitalaria

- Polyploidy, 805
- Viruses, 2595

Digitonin

Allium, 5420

Digitoxin

- Digitalis*, 6763

Dihydrogen phosphate

- Solanum.* Potato, 4588

Dill, *see* *Anethum*

Diluters, *see* modifiers

N-Dimethylaminosuccinamic acid

- Lotus.* Birdfoot trefoil, 4538

Dimethylhydrazine

- Saccharomyces*, 7215

Dinoseb-acetate

- Phaseolus*, 5278

Dioscorea, Yam

- Ascorbic acid, 2865
- Breeding, 4742
- Chromosome number, 4744
- Genetics, 1122
- History and evolution, 1123
- Hybridization, interspecific, 1122-3
- Polyploidy, 1122
- Quality, for storage, 1124
- Sapogenin, 1123, 4742
- Sex, 1122
- Sterility, fertility, 1123
- Varieties, 4743
- Weight, 4742

Diospyros, Persimmon

- Mutation, somatic, 2079
- Mutation, spontaneous, 3477
- Parthenocarpy, 2079
- Varieties, 3071, 6865

Diplocarpon

- Fragaria.* Strawberry, 1356

Diplodia

- Citrus*, 3062
- Zea.* Maize, 590-1, 2386, 3749, 4192, 5676

Distribution, *see* geography

Dithone

- Zea.* Maize, 4191

Ditylenchus

- Avena.* Oats, 2293
- Crop plants, 3682
- Hybridization, 3682
- Medicago*, 4472-3, 6434, 6441-2

Ditylenchus—continued

- Physiological races, 857
 - Trifolium.* Red clover, 857, 5486
- ## DNA polymerase, 5388
- Dolichos*
 - Chromosome morphology, 3389
 - Colchicine, 7157
 - Polyploidy, 7157
- ## Dominance, 1777-8
- Avena.* Oats, 462
 - Brassica.* Kale, 3282
 - Gossypium.* Cotton, 2771
 - Nicotiana.* Tobacco, 4745
 - Triticum.* Wheat, 5975, 5979
 - Zea.* Maize, 2347

Dormancy

- Arachis.* Groundnut, 4964
- Avena.* Oats, 4063
- Hordeum.* Barley, 633
- Malus.* Apple, 1258
- Secale.* Rye, 195
- Solanum.* Potato, 919, 2686
- Triticum.* Wheat, 394

Dothichiza

- Populus.* Poplar, 3219

Dothidella

- Hevea.* Rubber, 1223, 5544

Douglas fir, *see* *Pseudotsuga*

Drepanopeziza

- Populus.* Poplar, 6973

Drought resistance, *see* heat, drought resistance

Drying quality, *see* quality

Dryocosmus

- Castanea.* Chestnut, 3075, 4956

Duplicate genes, *see* multiple genes

Dwarfing, *see* height

EARLINESS, *see* growth period

Echinochloa

- Chromosome number, 2451
 - Growth period, 6303
 - Hybridization, interspecific, 2451
 - Mixtures of crops or genotypes, 6303
 - Sterility, fertility, 2451
- ## Ecology, 5436, 7234
- Forest trees, 7240
 - Quercus.* Oak, 1444
 - Vitis*, 6935

Ecotypes

- Allium.* Chives, 5138
- Larix.* Larch, 5049
- Medicago*, 1887, 2620
- Onobrychis.* Sainfoin, 868
- Panicum*, 4445
- Pinus.* Pine, 1476
- Poa*, 3825
- Populus.* Poplar, 6972
- Prunus.* Cherry, 3035
- Trifolium.* Red clover, 843-4, 6446
- Triticum.* Wheat, 2176
- Vitis*, 6925-6
- Zea.* Maize, 2363

Edgeworthia

- Chromosome number, 4690

Egg plant, *see* *Solanum*

Elaeis. Oil palm

- Breeding, 1222, 2935, 4813-5
- Fatty oil, 1221, 4815
- Genetics, 1221
- Selection, artificial, 2936
- Sex, 3798

Elder, *see* *Sambucus*

Eleusine

- Cochliobolus*, 661, 6305
- Germination, 4260

- Eleusine*—continued
 - Harvesting, 6304
 - Pellicularia*, 662
 - Piricularia*, 206, 5531
 - Quality, nutritive value, 1835
 - Selection, artificial, 6304
 - Variety trials, 2452
- Elm, *see Ulmus*
- Elymus*
 - Genetics, 6410
 - Hybridization, intergeneric, 3514, 5990, 6411
 - Hybridization, interspecific, 2602
- Embryo
 - Arachis*. Groundnut, 1306
 - Gossypium*. Cotton, 4633, 6555
 - Melilotus*. Sweet clover, 872
 - Oryza*. Rice, 3716, 4324-5
 - Triticum*. Wheat, 3939
 - Zea*. Maize, 6178
- Embryo sac
 - Gossypium*. Cotton, 4648
 - Malus*. Apple, 4891
- Embryology, 184
 - Crop plants, 5362
 - Forest trees, 6959
 - Gossypium*. Cotton, 1013
 - Ipomoea*. Sweet potato, 6537
 - Solanum*. Egg plant, 7129
- Empoasca*
 - Gossypium*. Cotton, 1932, 2766, 4663
 - Melilotus*. Sweet clover, 881
 - Ricinus*. Castor oil plant, 2922-4, 6743
 - Solanum*. Potato, 892
- Endive, *see Cichorium*
- Endomitosis
- Beta*. Sugar beet, 3685
- Saccharum*. Sugar cane, 4701
- Endopolyploidy, *see* endomitosis
- Endosperm
 - Agropyron*, 5983
 - Cocos*. Coconut, 1852
 - Coffea*. Coffee, 1165
 - Nicotiana*. Tobacco, 1165
 - Oryza*, 6353
 - Triticum*. Wheat, 2192, 5983
 - Zea*. Maize, 6160
- Ensilage
 - Zea*. Maize, 515, 3766, 6197
- Enzymes, 5435
 - Brassica*, 5141, 7054
 - Brassica*. Cabbage, 5719
 - Cereals, 2136
 - Crop plants, 5626, 5843
 - Gossypium*. Cotton, 5828, 5831, 5900
 - Hordeum*. Barley, 5613
 - Ipomoea*. Sweet potato, 6540
 - Malus*. Apple, 1257, 5771
 - Nicotiana*. Tobacco, 1133, 5628, 5805
 - Nocardia*, 3432
 - Penicillium*, 6854
 - Saccharomyces*, 1730, 3438, 7217
 - Saccharum*. Sugar cane, 6612
 - Secale*. Rye, 4091
 - Solanum*. Potato, 6528
 - Trifolium*. Red clover, 6450
 - Triticum*. Wheat, 5616, 5882
 - Vitis*, 1373, 3169, 5873
 - Zea*. Maize, 558, 2314, 3507, 5673, 5684, 5860
- Epidermis
 - Malus*. Apple, 5762
- Epilachna*
 - Phaseolus*. Lima bean, 1630
- Epistasis, 1795, 3550
 - Helianthus*. Sunflower, 4807
 - Lycopersicon*. Tomato, 5195
- Epitaxis—continued
 - Nicotiana*. Tobacco, 4745
 - Pennisetum*, 2599
 - Pennisetum*, for grain, 659
 - Zea*. Maize, 4151
- Epitrix*
 - Solanum*. Potato, 892
- Eragrostis*
 - Aluminium, 2601
 - Potassium, 2601
 - Variety trials, 4391
- Ergot, *see Claviceps*
- Eriobotrya*. Loquat
 - Varieties, 1270, 2097
- Eriophyes*
 - Pyrus*. Pear, 5763
 - Vitis*, 3164
- Erucic acid
 - Brassica*. Rape, 3756
- Erwinia*
 - Brassica*. Cabbage, 5148
 - Pyrus*. Pear, 1965, 3011
 - Solanum*. Potato, 4584
 - Sorghum*, 5679
 - Zea*. Maize, 1976, 5679
- Erysiphe*
 - Aegilops*, 4017
 - Avena*. Oats, 647, 1865, 1875, 4068-9, 5486
 - Beta*. Sugar beet, 4739
 - Brassica*. Rape, 1865
 - Cereals, 2144, 5960
 - Chromosome number, 2144
 - Crop plants, 2107
 - Cucumis*. Melon, 2005, 5167
 - Genetics, 5960
 - Hordeum*. Barley, 615, 622, 626, 647, 5486, 5500, 6264, 6272-6
 - Nicotiana*. Tobacco, 2884-5, 4750, 6646, 6700
 - Physiological races, 1865, 4069, 4516, 5960, 6274-5
 - Pisum*. Pea, 5734
 - Secale*. Rye, 5648
 - Sterility, fertility, 5960
 - Trifolium*. Red clover, 855-6, 3792, 4378, 4516, 5500, 6450
 - Triticum*. Wheat, 1995, 2252-3, 2256, 4015-7, 5486, 5615, 5648
- Essential oil
 - Anethum*, 5325
 - Cinnamomum*. Cinnamon, 1187
 - Citrus*, 3063
 - Coriandrum*, 5326
 - Cymbopogon*, 4823
 - Dichanthium*, 6402
 - Essential oil plants, 3693
 - Lavandula*, 6761
 - Matricaria*, 4821
 - Mentha*, 1697, 7204
 - Poncirus*, 3063
- Essential oil plants
 - Essential oil, 3693
- Esterase
 - Solanum*. Potato, 928
 - Zea*. Maize, 2370
- Estrogen
 - Medicago*, 6424
- Ethionine
 - Saccharomyces*, 3440-1
- Ethyl alcohol
 - Allium*. Onion, 1508
- Ethyleneimine, 172
 - Avena*. Oats, 2130
 - Crop plants, 247, 5597
 - Hordeum*. Barley, 2081, 2130, 2409, 6252
 - Lens*. Lentil, 5319
 - Lycopersicon*. Tomato, 2071

Ethyleneimine—*continued*

- Pisum*. Pea, 1683, 7185
- Streptomyces*, 1704
- Trichothecium*, 1737
- Triticum*. Wheat, 351, 354–5, 2045–6
- Vicia*. Broad bean, 1605
- Ethyl methanesulphonate
- Hordeum*. Barley, 619, 631, 3890, 4223–5
- Lycopersicon*. Tomato, 110, 5206
- Pennisetum*, for grain, 4258
- Pisum*. Pea, 7185, 7187
- Solanum*. Potato, 904
- Sorghum*, 680
- Triticum*. Wheat, 378, 3890, 3946, 3964, 5999
- Zea*. Maize, 539, 3640, 3675, 6159

Eucalyptus

- Breeding, 3209
- Geographical races, 5083
- Height, 3208
- History and evolution, 5084–6
- Hybridization, interspecific, 1464, 5082, 6983
- Phenols 3223 5084–6, 6984
- Taxonomy, 3223, 5084–6, 6984
- Variety trials, 3209

Euchlaena

- History and evolution, 6127
- Hybridization, intergeneric, 532, 1937, 2338, 4141, 5522
- Phenols, 532
- Sterility, fertility, 1937

Euonymus

- Taxonomy, 2940

Eurygaster

- Triticum*. Wheat, 2255
- Evolution, general theory, 150–2, 1807, 1829, 3458–9, 3590, 5368, 5408–9, 5545, 5549
- Crop plants, 5583
- Forest trees, 6957
- See also history and evolution

FABRAEA

- Pyrus*. Pear, 5763
- Fagopyrum*. Buckwheat
- γ rays, 2062
- Geographical races, 6085
- Germination, 6085
- Heterosis, 6084
- Heterostyly, 6086
- Hybrid varieties, 4046
- Hybridization, graft, 6085
- Mutation, induced, 2062
- Polyploidy, 3484
- Seed production, 6086
- Sterility, male, 4047

Fagus. Beech

- Flower, 5074
- Mutation, 5073
- Taxonomy, 6978
- Variation, 6978
- Water, effect of, 5074

Fatty acids

- Cucurbita*, 7083
- Linum*. Flax, 2795

Fatty oil

- Avena*. Oats, 470
- Benicasa*, 5174
- Brassica*. Mustard for oil, 3623, 5463
- Brassica*. Rape, 1973, 3632
- Brassica*. Turnip, 3632
- Elaeis*. Oil palm, 1221, 4815
- Glycine*. Soya bean, 1656, 3397
- Gossypium*. Cotton, 975, 1014, 1019–20, 1923, 1928, 1930–1, 2737, 2782–3
- Helianthus*. Sunflower, 1210, 1213–5, 3631, 4808–11, 6753, 6755
- Juglans*. Walnut, 6867

Fatty oil—*continued*

- Linum*. Linseed, 4801–2
- Macadamia*, 2017
- Oryza*. Rice, 4293
- Zea*. Maize, 520, 577–8, 2003, 4181, 6199, 6201–2

Female sterility, see sterility, female

Fermentation quality, see quality

Fertility, see sterility, fertility

Fertilization, sexual

- Beta*. Mangel, 1091
- Beta*. Sugar beet, 1092
- Crop plants, 1838
- Gossypium*. Cotton, 4646
- Lupinus*. Lupin, 876
- Malus*. Apple, 4890
- Medicago*, 2621
- Pisum*. Pea, 1610
- Prunus*. Apricot, 1271
- Rubus*. Dewberry, 1337
- Thea*. Tea, 6709
- Triticum*. Wheat, 3933, 5982
- Vicia*. Broad bean, 1610
- Zea*. Maize, 397, 558, 2375
- Zea*. Popcorn, 603

Fertilizers, see nutrients

Fescue, see *Festuca*

Festuca

- Amphidiploidy, 1874, 3787
- Breeding, 195, 6394
- Chromosome morphology, 1870, 2581, 6398
- Cold resistance, 1873, 3787
- Crossing over, 6395
- Cytology, 2578, 4434
- Development, 1863
- Genetics, 787, 790
- Growth period, 5486, 6372
- Heterosis, 787
- History and evolution, 2579, 2581, 4434, 6397
- Hybridization, 2581
- Hybridization, intergeneric, 780, 1877, 2578, 3787, 4366–8, 4435, 6381, 6396
- Hybridization, interspecific, 4366–7, 4411, 4435, 6396
- Photoperiodism, 1863
- Polyploidy, 1864, 2580–1, 3686, 4434–5, 6395
- Quantitative characters, 787
- Sterility, fertility, 3787
- Sterility, male, 6381, 6396
- Taxonomy, 780, 2579–81, 4434, 6399
- Variation, 6397
- Varieties, 788, 1964, 2096, 4433, 5536, 6372
- Variety trials, 4386, 4407
- Vegetative reproduction, 789–90
- Yield, 1877, 5486

Fibre plants

- Pellicularia* 953

Fibre quality, see quality

Ficus. Fig

- Climate, 6858
- Cold resistance, 1291
- Genetics, 4944
- Growth period, 6858
- History and evolution, 3693
- Hybridization, interspecific, 3693
- Latex, 1290
- Parthenocarp, 6859
- Variety trials, 3065

Field bean, see *Phaseolus* and *Vicia*

Fig, see *Ficus*

Filbert, see *Corylus*

Fir, see *Abies*

Flavonoids

- Acacia*, for tanning, 4817

Flax, see *Linum*

Flower

- Acer*, 5065
- Arachis*. Groundnut, 4965
- Avena*. Oats, 4052
- Betula*. Birch, 1460
- Brassica*. Cabbage, 5147
- Brassica*. Sprouting broccoli, 5153
- Cichorium*. Chicory, 7065
- Cocos*. Coconut, 3090
- Cucumis*. Melon, 7074
- Dactylis*, 766
- Daucus*. Carrot, 7025
- Fagus*. Beech, 5074
- Forest trees, 2078
- Fragaria*. Strawberry, 6895
- Glycine*. Soya bean, 5290
- Gossypium*. Cotton, 2774-5
- Helianthus*. Sunflower, 6754
- Hibiscus*, 2810
- Hordeum*. Barley, 610, 2403, 2423
- Leguminous forage crops, 4455
- Lycopersicon*. Tomato, 1581
- Malus*. Apple, 2983
- Medicago*, 3756
- Nicotiana*. Tobacco, 6672
- Oryza*. Rice, 4322-3
- Populus*. Poplar, 5069
- Prunus*. Almond, 4959, 6870
- Pyrus*. Pear, 4856
- Ricinus*. Castor oil plant, 6741
- Salix*. Willow, 3224
- Solanum*. Egg plant, 7128
- Sorghum*, for grain, 2467
- Swietenia*, 5081
- Theobroma*. Cacao, 2020
- Trifolium*. Red clover, 6445, 6449
- Triticum*. Wheat, 261, 401, 2227, 3979, 5546-7, 5563
- Vicia*. Broad bean, 5250
- Vitis*, 1380, 6933

Fluorescence

- Gossypium*. Cotton, 5833
- Hordeum*. Barley, 425
- Lolium*, 779
- Triticum*. Wheat, 425, 5637

Fluoride, sodium

- Allium*. Onion, 1822

5-Fluorodeoxyuridine

- Hordeum*. Barley, 1817, 1821
- Vicia*. Broad bean, 1817, 3597, 5404

N-Fluorophenylalanine, 5339

Fodder beet, *see Beta*

Foeniculum

- Chromosome aberrations, 5139
- Gammexane, 5139

Forage beet, *see Beta*

Forest trees

- Breeding, 1397, 1401-5, 1437-9, 3202-3, 5040, 5045-6, 5053, 5056, 5532, 6954
- Competition, 5062
- Ecology, 7240
- Embryology, 6959
- Evolution, general theory, 6957
- Flower, 2078
- Fungi, 1399
- Genetics, 1393, 1399, 1773, 5060
- Geographical races, 1396, 1441, 5038, 6958
- History and evolution, 5058
- Hybrid varieties, 5047
- Hybridization, interspecific, 1393, 1395, 5058, 6959
- Inbreeding, 5059
- Insects, 1400, 1420, 1425
- Mutation, induced, 2078
- Pathology, 1421, 1438
- Photosynthesis, 5060
- Physiology, 1398, 1420

Forest trees—*continued*

- Pollen, 3211
- Pollination, 3205
- Polyploidy, 3483
- Population genetics, 1394
- Quality, of timber, 1401, 5061
- Quantitative characters, 1440
- Selection, artificial, 1440
- Statistics, genetics, 1436
- Variation, 5059-60
- Vegetative reproduction, 5047
- Fragaria*. Strawberry
 - Aphelenchoides*, 5790
 - Biochemistry, 1356
 - Breeding, 1345, 1961, 2951, 3118, 4848, 4990
 - Calcium, 1355
 - Cold, effect of, 1352
 - Cold resistance, 1961, 3131, 5536
 - Combining ability, 4993
 - Corynebacterium*, 5790
 - Defoliation, 2941
 - Development, 1352, 3686, 4847
 - Diplocarpon*, 1356
 - Flower, 6895
 - Fruit, 1353, 6895-7, 6904
 - γ rays, 2947
 - Genetics, 1359, 1964, 5534, 6895, 6897, 6907
 - Genome analysis, 6902
 - Geography, 4847
 - Growth period, 1353, 1964, 6895
 - Herbicides, 6894
 - History and evolution, 1345, 1354, 4995
 - Hybridization, 4866
 - Hybridization, intergeneric, 6898
 - Hybridization, interspecific, 1345, 1348, 4995, 6898-9
 - Inbreeding, 2943
 - Linkage, 1347
 - Mycosphaerella*, 3134, 5791
 - Pathology, 3130, 5918
 - Photoperiodism, 4847
 - Phytophthora*, 218, 1345, 3132-3, 5003, 5919, 6905
 - Plant collections, 3120, 3129, 6903
 - Pollen, 2947
 - Pollination, 5002
 - Polyploidy, 4995, 5534, 6899, 6902
 - Quality, for freezing, 2959
 - Quality, for transporting, 3128
 - Quality, nutritive value, 2949, 3125-7
 - Quality, of edible product, 1238, 3124, 4996
 - Quantitative characters, 1348, 6895
 - Sclerotinia*, 1346, 1357, 3684, 5789, 6906
 - Sex, 6895
 - Size, 6896-7
 - Sphaerotheca*, 1346
 - Sterility, fertility, 4874, 5534
 - Sterility, male, 3131
 - Taxonomy, 1354
 - Variation, 6899
 - Varieties, 1236, 1349-51, 1962, 2949, 3121-3, 4842, 4994, 4996-5001, 5536, 6900-1
 - Variety trials, 1342-4, 1346, 3114-7, 3119-20, 3123, 4990, 6892-4
 - Vegetative reproduction, 6903
 - Verticillium*, 1358-9, 1962, 6907
 - Viruses, 1360-2, 3658, 5455
 - Weight, 6904
 - X rays, 4992
 - Yield, 4851
- Freezing quality, *see* quality
- French bean, *see Phaseolus*
- Frost, *see* cold resistance
- Fruit
 - Sugar beet, 1108
 - Capsicum*, 6727
 - Cocos*. Coconut, 3091

Fruit—continued

- Cucumis.* Melon, 5165
- Cucurbita.* 5165
- Fragaria.* Strawberry, 1353, 6895–7, 6904
- Gossypium.* Cotton, 2776, 3767, 6570
- Lycopersicon.* Tomato, 1887, 5222
- Malus.* Apple, 2983–4, 4885, 4888, 5762
- Picea.* Spruce, 7006–7
- Prunus.* Apricot, 1273
- Prunus.* Plum, 3023, 3775
- Rubus.* Raspberry, 3101
- Solanum.* Egg plant, 3771
- Trifolium.* Red clover, 4514
- Vitis.* 5010
- Fruit crops, 1231, 1748
- Breeding, 1235–7, 2946, 2952, 4846, 4853, 4867, 6780–1
- Climate, 2956, 4872
- Cold resistance, 6788–9
- Fungi, 5871
- Fungicides, 2957
- Growth period, 4873
- Insects, 5775
- Lespeyresia.* 5774, 5776
- Mutation, induced, 4844
- Pathology, 5756, 5766, 5779
- Plant collections, 4878, 6787
- Pollen, 4875
- Pollination, 6845
- Quality, for canning, 1872
- Quality, of edible product, 3640, 4876
- Sclerotinia.* 5780
- Varieties, 2018, 2955, 4868–70, 4872, 6783–5
- Variety trials, 1232–4, 2942, 2944, 4840, 4865, 6779
- Viruses, 4857
- X rays, 6845
- Fungi, 66, 3466
- Avena.* Oats, 5959
- Beta.* Sugar beet, 4737
- Bromus.* 4381
- Cereals, 3848
- Cocos.* Coconut, 1325
- Crop plants, 5841
- Cucurbita.* 5163
- Forest trees, 1399
- Fruit crops, 5871
- Gossypium.* Cotton, 6580
- Grasses, 756
- Helianthus.* Sunflower, 1955, 5738
- Hordeum.* Barley, 1968, 3882, 5959
- Ipomoea.* Sweet potato, 951
- Leguminous forage crops, 5726
- Linum.* Flax, 5836, 5959
- Lycopersicon.* Tomato, 5228, 5500
- Malus.* Apple, 4880, 5762, 5916–7
- Medicago.* 6438
- Musa.* Banana, 5007
- Phaseolus.* 5272
- Physiological races, 5841
- Pisum.* Pea, 5500, 5726
- Populus.* Poplar, 1422, 5925
- Pyrus.* Pear, 4880
- Solanum.* Potato, 890
- Sorghum, 692
- Theobroma.* Cacao, 4775
- Triticum.* Wheat, 430, 1896, 3882, 4014, 5636, 5650, 5878, 5959, 5978
- Vitis.* 5739, 5751, 5754
- Zea.* Maize, 534, 1955, 5655, 5666
- Fungicides, 7068
- Fruit crops, 2957
- Hypomyces.* 7068
- Malus.* Apple, 6793
- Oxycoccus.* Cranberry, 6908
- Prunus.* Apricot, 2957
- Pyrus.* Pear, 6793

Fusarium

- Glycine.* Soya bean, 1006
- Gossypium.* Cotton, 1954, 2787–8, 5818–9, 5827–8, 5905, 5907, 6581–3
- Ipomoea.* Sweet potato, 3770, 4614
- Linum.* Linseed, 6750
- Lycopersicon.* Tomato, 5231–2, 7120–2
- Physiological races, 7121–2
- Pisum.* Pea, 5926
- Triticum.* Wheat, 5926
- See also *Hypomyces*
- Fusicladium.* see *Venturia*
- γ RAYS, 2080, 3595, 5328
- Agropyron.* 2048
- Arachis.* Groundnut, 1306
- Avena.* Oats, 2130
- Beta.* Sugar beet, 85
- Brassica.* Mustard for oil, 2914
- Cereals, 2051
- Corchorus.* Jute, 6588
- Crop plants, 3814
- Cucumis.* Melon, 2075
- Fagopyrum.* Buckwheat, 2062
- Fragaria.* Strawberry, 2947
- Glycine.* Soya bean, 2055, 2060
- Gossypium.* Cotton, 2063, 2066, 2068, 2759, 4648, 6560–1
- Gymnosperms, 6985
- Helianthus.* Sunflower, 2083
- Hordeum.* Barley, 99, 130, 613, 2028, 2081–2, 2130, 2424, 4216, 6252, 6261
- Larix.* Larch, 3235, 5111
- Linum.* Flax, 4672
- Lycopersicon.* Tomato, 104, 2069–71, 5188, 5208, 5551
- Malus.* Apple, 2076, 4891, 4904
- Mentha.* 5321
- Nicotiana.* Tobacco, 3506, 6680
- Oryza.* Rice, 1856, 2509, 4303
- Paspalum.* 792
- Pinus.* Pine, 6950, 6985
- Pisum.* Pea, 1680, 1684, 2057–9, 2061, 2069, 5305
- Quercus.* Oak, 6950
- Ribes.* Black currant, 4985
- Ricinus.* Castor oil plant, 6738
- Saccharomyces.* 1724–7
- Saccharum.* Sugar cane, 4705
- Secale.* Rye, 156, 2299
- Solanum.* Potato, 27, 2072–3
- Streptococcus.* 5328
- Trifolium.* 840
- Triticum.* Wheat, 86, 102, 353, 2046, 2048–50, 2052, 2163–4, 2185, 3739, 3741–2, 3964, 5997, 6027, 6173
- Vicia.* Broad bean, 1604–5, 2061
- Vicia.* Vetch, 156, 2061
- Zamia.* 6985
- Zea.* Maize, 3498, 3738, 4155–6, 6156–9, 6173
- β-Galactosidase, 5562
- Gallocyanin-chromealum
- Allium.* Onion, 3591
- Gametocides
- Cajanus.* 7200
- Gamma rays, see γ rays
- Gammexane
- Foeniculum.* 5139
- Garcinia*
- Taxonomy, 6876
- Garlic, see *Allium*
- Garuga*
- Chromosome morphology, 2938
- History and evolution, 2938
- Gene conversion
- Saccharomyces.* 1717
- Gene dosage
- Triticum.* Wheat, 2270

Genes, *see* genetics

Genes, multiple, *see* multiple genes

Genes, nature and physiology, 3534-5, 3556-7, 5391, 5410

Genetic stocks, *see* plant collections

Genetics, 1-2, 4, 9, 12, 34-41, 178, 225, 1738-9, 1750-1, 1759-66, 1768-72, 1774, 1845, 3429, 3456, 3466, 3511-2, 3524-9, 3539-47, 5354, 5366-71, 5414, 5429, 5519, 7231-3

Acacia. For tanning, 4817

Aegilops, 2271, 3709, 3924, 3935

Agropyron, 1986, 2609

Allium. Onion, 1507, 5128, 7031

Alnus. Alder, 1463

Arachis. Groundnut, 2002, 4962, 4970, 6872

Asparagus, 1516, 7034

Avena. Oats, 465, 469, 645, 647, 649, 1973, 2273, 2284, 2287, 2290-2, 4052, 4068-9, 4071-2, 6089, 6100

Beta. Sugar beet, 1119, 2861, 4714, 4730, 5486

Brassica, 5143, 7041

Brassica. Brussels sprouts, 5155

Brassica. Kale, 3503, 5149

Brassica. Mustard for oil, 4788

Brassica. Rape, 3756, 4793, 6482

Brassica. Sprouting broccoli, 3285

Brassica. Swede, 3755, 6482

Brassica. Turnip, 3650, 5445

Capsicum, 1189, 6730

Carthamus. Safflower, 1219, 1997, 4812

Ceratocystis, 5931

Cereals, 2106

Cicer. Chickpea, 5315, 7197

Citrullus. Water melon, 2007

Citrus. Grapefruit, 1289

Cocos. Coconut, 1320, 1328, 3092, 4972

Coix, 4347

Corchorus. Jute, 4680-1

Coriandrum, 7202

Crop plants, 252, 2035-6, 2107, 3468, 5621

Cucumis. Cucumber, 3322, 5181, 7086-7

Cucumis. Melon, 3305, 5167, 5181, 7072

Cucumis. Minor species, 5181

Cucurbits, 7069

Cynodon, 772

Dactylis, 4358, 4420

Daucus. Carrot, 5123, 7022

Dioscorea. Yam, 1122

Eleis. Oil palm, 1221

Elymus, 6410

Erysiphe, 5960

Festuca, 787, 790

Ficus. Fig, 4944

Forest trees, 1393, 1399, 1773, 5060

Fragaria. Strawberry, 1359, 1964, 5534, 6895-7, 6907

Gibberella, 3434

Glycine. Soybean, 1644, 1655, 1664, 3402, 3404, 3408, 5286-9, 5296, 7167, 7169

Gossypium. Cotton, 982-4, 991, 1017-8, 1842, 1901, 1921, 1942-4, 2731-3, 2753-4, 2757, 2773, 2781, 4626-7, 4649, 4653

Grasses, 1871

Hibiscus, as vegetable, 5238

Hordeum. Barley, 615, 637, 644-7, 651, 1865, 1875, 1878, 1964, 1973, 1998, 2028, 2127, 2401-4, 2436, 2440, 3890, 4212-3, 4238, 4250, 4253, 5934, 6238-40, 6270, 6275, 6281-2

Humulus. Hop, 1182, 2901

Hypomyces, 3300

Ipomoea. Sweet potato, 2727, 4609

Leucaena, 2029, 4409, 5078

Linum. Linseed, 1205, 4798, 4803

Lolium, 779, 784, 1874, 4379

Lotus. Birdsfoot trefoil, 4535, 6472

Luffa, 1053, 1896, 4687

Lupinus. Lupin, 1755, 4372, 4456

Genetics—*continued*

Lycopersicon. Tomato, 1565, 1579, 1582, 1585, 1594-1887, 1964, 3328-9, 3333, 3348, 3354-5, 3638, 3685, 5114, 5190, 5218, 5225, 5229, 5538, 7097-9, 7100, 7118-20

Malus. Apple, 200, 2996, 4881-2, 5757, 5759, 5765, 5764, 5767

Medicago, 823, 1994, 2028, 2614, 2625, 3756, 4380, 4404, 4482-7, 4501, 4505, 5558, 5573-5, 6421-3

Melilotus. Sweet clover, 2658, 3756, 4370-1, 4456

Morus. Mulberry, 6861

Musa. Banana, 1363, 5008

Nicotiana. Tobacco, 1128-9, 1150, 2870-1, 3683, 3754, 4750, 5811, 5813, 5868, 6657, 6662, 6664, 6666, 6667, 6671-3, 6679, 6694, 6700

Oryza. Rice, 710, 731, 745, 1953, 2477, 2501, 2533, 3726-7, 4291-8, 4331, 4335, 4338-40, 4342, 5523, 6328-9, 6332, 6353, 6367

Panicum, 806, 6408

Pellicularia, 1036

Pennisetum, 3761, 6301

Pennisetum, for grain, 4257, 4374, 6289-90, 6300

Phalaris, 5557, 5571

Phaseolus, 1618, 2000, 3372-3, 3386, 3626, 5257, 5465, 5593, 7140-1

Phaseolus. Lima bean, 5280

Picea. Spruce, 1487

Pinus. Pine, 1408-9, 1411, 1477, 5104, 6989-90, 6990, 6991

Piricularia, 6364

Pisum. Pea, 1675, 1677, 1688, 1968, 3417

Populus. Poplar, 1446, 6966

Prunus. Cherry, 3032

Prunus. Plum, 3775

Pseudotsuga. Douglas fir, 1492, 3239

Puccinia, 2263

Pyrus. Pear, 1964, 4906, 6821

Raphanus. Radish, 1503

Ribes. Black currant, 4988

Ricinus. Castor oil plant, 1200, 2921

Rubus. Blackberry, 4981

Rubus. Raspberry, 3103, 6772, 6887

Saccharomyces, 1707, 3428, 3437-41, 5344, 7217

Saccharum. Sugar cane, 3764, 4703, 6602

Schizosaccharomyces, 1707, 5349

Secale. Rye, 485, 3684, 4080, 4082, 6112

Setaria, 6288

Solanum. Egg plant, 3771, 5225

Solanum. Potato, 200, 932-5, 1862, 2680-1, 2944, 4600, 4607, 5690, 5895, 6493-4

Sorghum, 667, 683, 686, 1900, 2473, 3624, 3747, 4278-5464, 5530, 6320

Thea. Tea, 1157, 4759, 6709-10

Theobroma. Cacao, 4772-3, 4778

Thuja, 1406

Trifolium. Alsike clover, 2644

Trifolium. Minor species, 6457

Trifolium. Red clover, 221, 4378, 4516

Trifolium. White clover, 859-60, 2641, 5559

Triticum. Wheat, 278, 287, 330, 338, 377, 391, 394, 411-2, 431, 433, 439-42, 446-8, 450, 452, 455, 1765, 1840, 1973, 1977-8, 1990, 1993, 1995-6, 2028, 2165-2184, 2191-2, 2226, 2247, 2252, 2262, 3648, 3709-13890, 3916-7, 3924, 3935, 3945, 3959, 3965, 3991, 4014, 4024-5, 4030-2, 4037-8, 4041, 5443, 5546-7, 5566, 5650, 5850-1, 5926, 5970-4, 6038, 6051, 6063, 6066

Ustilago, 587, 6278

Vaccinium, 1962

Vicia. Broad bean, 5244-5

Vicia. Vetch, 6461

Vitis, 2004, 3139, 3149-50, 3189, 5009-11, 5033-4, 6907

Zea. Maize, 11, 28, 494-6, 498-9, 562, 567, 570, 572-580, 590-1, 1964, 2001, 2106, 2312-5, 2348-9, 2372375-6, 2386, 2393, 2553, 3471, 3486, 3495, 3627-4100-6, 4108, 4181, 4192, 5430, 5533, 6124-6, 6126198, 6211, 6217

Genetics—continued

- Zea*. Popcorn, 493
- Zea*. Sweet corn, 598, 3627, 6221

Genome analysis

- Aegilops*, 4043
 - Agropyron*, 2604–5, 3711, 4450–1
 - Annona*, 1896
 - Avena*. Oats, 464, 4061
 - Fragaria*. Strawberry, 6902
 - Gossypium*. Cotton, 14, 1009–10
 - Hordeum*. Barley, 200
 - Mentha*, 5322–3
 - Musa*. Banana, 5006
 - Oryza*. Rice, 1853, 2527, 4301
 - Phaseolus*, 7143
 - Secale*. Rye, 4043
 - Solanum*. Potato, 2943
 - Tripsacum*, 533
 - Triticum*. Wheat, 342, 379
 - Zea*. Maize, 533
- ## Geographical races
- Abies*. Fir, 3234, 7008
 - Atropa*, 4819
 - Brassica*. Sarson, 1846
 - Castanea*. Chestnut, 4955
 - Eucalyptus*, 5083
 - Fagopyrum*. Buckwheat, 6085
 - Forest trees, 1396, 1441, 5038, 6958
 - Gossypium*. Cotton, 6549
 - Larix*. Larch, 7011
 - Lens*. Lentil, 1695
 - Malus*. Apple, 2977, 6801
 - Nicotiana*. Tobacco, 1846
 - Oryza*. Rice, 6349
 - Phalaris*, 797, 5557
 - Picea*. Spruce, 5106–7, 6992
 - Pinus*. Pine, 1470–2, 3207, 3230, 5043, 5055, 5092, 5712, 6992–3, 7001, 7003
 - Pseudotsuga*. Douglas fir, 5052, 5113, 6955
 - Sorghum*, for grain, 1846
 - Trifolium*. Subterranean clover, 4520
 - Vicia*. Vetch, 2650
 - Zea*. Maize, 6167

Geography

- Fragaria*. Strawberry, 4847
- Lespedeza*, 2654
- Panicum*, 807
- Pseudotsuga*. Douglas fir, 3238
- Secale*. Rye, 6109
- Triticum*. Wheat, 3918, 5973
- Zea*. Maize, 2941

Germination

- Avena*. Oats, 6102
- Beta*. Sugar beet, 1095–6
- Cereals, 277–8, 3895
- Cucumis*. Cucumber, 5184
- Cyperus*, 4689
- Eleusine*, 4260
- Fagopyrum*. Buckwheat, 6085
- Gossypium*. Cotton, 5602
- Medicago*, 6433
- Nicotiana*. Tobacco, 4753, 6668
- Oryza*. Rice, 6345
- Phalaris*, 797
- Phaseolus*, 1621
- Picea*. Spruce, 7005
- Prunus*. Peach, 6851
- Pyrus*. Pear, 1268
- Saccharum*. Sugar cane, 1067, 5522
- Secale*. Rye, 4091
- Triticum*. Wheat, 278, 387, 430, 3963–4, 5602
- Zea*. Maize, 2371, 2373, 4162, 4187–8

Germplasm banks, *see* plant collections

Gibberella

- Genetics, 3434

Gibberella—continued

- Gossypium*. Cotton, 6581
 - Hordeum*. Barley, 2145, 6277
 - Physiological races, 2145
 - Triticum*. Wheat, 2145, 4018–21, 6061
 - Zea*. Maize, 586, 2387, 3673, 5477
- ## Gibberellins
- Cannabis*. Hemp, 4678
 - Cucumis*. Cucumber, 3324
 - Gibberella*, 3434
 - Lycopersicon*. Tomato, 1581, 5190
 - Malus*. Apple, 6786
 - Oryza*. Rice, 4322–3
 - Pyrus*. Pear, 6786
 - Triticum*. Wheat, 5955, 5995
 - Vitis*, 1388, 4991, 6931
 - Zea*. Maize, 5955
- Ginger, *see* *Zingiber*
- ## Glands
- Gossypium*. Cotton, 1030
- ## Glass, cultivation under
- Cucumis*. Cucumber, 7088
 - Lycopersicon*. Tomato, 5215, 5224
 - Triticum*. Wheat, 3919
- ## Glasshouse, *see* glass, cultivation under
- ## Gloeosporium
- Malus*. Apple, 6775
 - Populus*. Poplar, 1430
- ## Gloeotinia
- Lolium*, 187, 4379
- ## Glomerella
- Citrullus*. Water melon, 1548
 - Coffea*. Coffee, 2894, 4771, 6701
 - Saccharum*. Sugar cane, 4705
- ## Glucose
- Avena*. Oats, 4053
- ## β -Glucosidase
- Heterodera*, 942
 - Medicago*. Sweet clover, 870, 4371
- ## Glucosides
- Brassica*. Rape, 4793
 - Medicago*. Sweet clover, 870
 - Sorghum*, for sugar, 4456
- ## Glumes
- Zea*. Sweet corn, 6221
- ## Glutathione
- Zea*. Maize, 528
- ## Glycine
- Soya bean
- ## Anatomy, 1672
- Back crossing, 1645
 - Biochemistry, 1661, 1668
 - Breeding, 1638, 1642, 2029, 7159, 7161, 7163, 7168
 - Calcium, 1660, 7167
 - Cell division, 1646
 - Cercospora*, 1670
 - Chromosome aberrations, 1652
 - Cold resistance, 5291
 - Colour, 1644, 1646, 5289
 - Competition, 1663
 - Cytology, 2029
 - 2,3-Dichloroisobutyrate, sodium, 1654
 - Fatty oil, 1656, 3397
 - Flower, 5290
 - Fusarium*, 1006
 - γ rays, 2060
 - Genetics, 1644, 1655, 1664, 3402, 3404, 3408, 5286–9, 5296, 7167, 7169
 - Grafting, 7167
 - Growth period, 3399, 3407, 5287, 5291, 7168
 - Habit, 5288
 - Heat, drought resistance, 5295
 - Heterodera*, 1671, 2002, 5296–8
 - Hybridization, 5290
 - Irrigation, 3400
 - Meloidogyne*, 1006, 1672

Glycine. Soya bean—continued

- Mitomycin-C, 1646
- Mixtures of crops or genotypes, 1662, 3401, 5285, 5294
- Mutation, 1646
- Mutation, induced, 1647, 2055, 2060
- Neutrons, 1652, 7163
- Nutrients, 1659, 3400
- Peronospora*, 1668
- Photoperiodism, 1674, 5299
- Phytophthora*, 1669, 7171
- Plant collections, 5291
- Pollen, 5290
- Pollination, 1653
- Population genetics, 5292
- Protein, 1642, 1656, 3397
- Pseudomonas*, 1664, 3402-3, 7170
- Quality, of edible product, 1655
- Quantitative characters, 1645, 3390, 5286, 7163
- Radiation, 1647, 2055
- Rhizobium*, 818, 1665-7, 3404-5
- Sclerotinia*, 3407
- Seed, 1655, 1670, 3397, 3408
- Selection artificial, 1648-9, 5292, 7164
- Serology, 3405
- Shedding, 3396
- Statistics, biometry, 3390
- Sterility, fertility, 1654, 3396
- Strontium, 1660, 7167
- Successional crops, 1658
- Temperature, effect of, 1674
- Toxic soils, 1661
- Variation, 5286, 5291-2
- Varieties, 213, 1650-1, 2055, 2093, 2095-6, 3391-5, 5241, 5293, 7165-6
- Variety trials, 1636-7, 1639-41, 1975, 3393-4, 3398, 3400, 3794, 5282-5, 5295, 7158, 7160, 7162
- Viruses, 1673, 3408
- Xanthomonas*, 3406, 7170
- Yield, 1643, 1657

Goat grass, *see Aegilops*

Gooseberry, *see Ribes*

Gossypium. Cotton

- Acclimatization, 2784
 - Aneuploidy, 1011
 - Anthonomus*, 1029-30, 2792
 - Back crossing, 990, 6552
 - Biochemistry, 1933, 5903, 6566
 - Biotin, 5830, 5847
 - Breeding, 954-5, 957, 959, 961-2, 964-8, 970-4, 976, 1747, 1957, 2736, 2738-9, 2743, 2750, 2783, 4616-20, 4622, 4624, 4628, 5529, 6541-2, 6544, 6548, 6550, 6565
 - Chemicals, effect of, 2064, 6560
 - Colour, 982, 1921, 2761,
 - Cytomixis, 4632
 - Cytoplasmic inheritance, 4628
 - 2,4-D, 992
 - Development, 6570, 6581
 - Dominance, 2771
 - Embryo, 4633, 6555
 - Embryo sac, 4648
 - Embryology, 1013
 - Empoasca*, 1932, 2766, 4663
 - Enzymes, 5828, 5831, 5900
 - Fatty oil, 975, 1014, 1019-20, 1923, 1928, 1930-1, 2737 2778, 2782-3
 - Fertilization, sexual, 4646
 - Flavonols, 6576
 - Flower, 2774-5
 - Fluorescence, 5833
 - Fruit, 2776, 3767, 6570
 - Fungi, 6580
 - Fusarium*, 1954, 2787-8, 5818-9, 5827-8, 5905, 5907, 6581-3
 - γ rays, 2063, 2066, 2068, 2759, 4648, 6560-1
- Gossypium*. Cotton—continued
- Genetics, 982-4, 991, 1017-8, 1842, 1901, 1921, 1942-4, 2731-3, 2753-4, 2757, 2773, 2781, 4626-7, 4649, 4655
 - Genome analysis, 14, 1009-10
 - Geographical races, 6549
 - Germination, 5602
 - Gibberella*, 6581
 - Glands, 1030
 - Growth period, 996, 1004, 1012, 1024, 1887, 1922, 1923, 1942-4, 2067, 2759, 2768-9, 2786, 4645, 6566-7, 6570
 - Habit, 1842
 - Hairs, 4663
 - Harvesting, 2785, 3767
 - Heat, drought resistance, 1024, 6578
 - Heat effect of, 5906
 - Heliothis*, 4664
 - Hemitarsonemus*, 225
 - Herbicides, 4665
 - Heterosis, 994-5, 1024, 2767, 4629, 6553
 - History and evolution, 1007, 1010,
 - Hybridization, 985-9, 2757, 2773, 4004, 6569
 - Hybridization, graft, 999, 1894, 2789, 5822
 - Hybridization, intergeneric, 6557
 - Hybridization, interspecific, 236, 975, 991-3, 1000, 1009, 1025-6, 1894, 1900, 1918, 2733, 2758, 4631-6553-7, 6564
 - Hybridization, wide, 4630
 - Inbreeding, 994-5, 2767
 - Inflorescence, 2754
 - Insects, 6541
 - Irrigation, 1024, 4652
 - Leaf, 4634-5, 4649, 4663, 6550
 - Light, effect of, 2772
 - Linkage, 1011, 2755-6,
 - Matrocliny, 996
 - Meiosis, 1008, 1918
 - Micurinism, 4004, 6011, 6569
 - Multiple alleles, 6559
 - Mutation, 2761, 4635, 4648
 - Mutation, induced, 997-8, 2063, 2759-60, 6560-1
 - Mutation, spontaneous, 1925, 2757, 6558-9
 - Neutrons, 2065-6, 2759, 6561
 - Nitrogen, 6583
 - Nutrients, 2786, 4647, 4652, 4655
 - Nucleic acids, 1013, 4661
 - Ovule, 2773
 - Pectinophora*, 5522
 - Pellicularia*, 4655
 - Phakopsora*, 4654
 - Phosphorus, 6581
 - Photoperiodism, 2066, 4666-7
 - Physiology, 5901
 - Plant collections, 2752
 - Pleiotropy, 4634, 6552
 - Pollen, 982, 2756
 - Pollination, 2066, 2741, 2770-1, 4646-7, 4651, 6011, 6429, 6568-9
 - Polyploidy, 995, 2757, 2767, 4643-4, 6554.
 - Population genetics, 4631
 - Potassium, 6583
 - Protein, 1930, 2778
 - Quality of fibre, 983, 1005, 1015-8, 1934, 1941, 1942, 2063, 2751, 2758, 2779-81, 4627, 4650-1, 4665, 6555, 6571-4
 - Quantitative characters, 983-4, 993, 1845, 1945, 4668
 - Radioactive isotopes, 2065, 2067, 2760
 - Seed, 975, 993, 1014, 1027, 1922, 1924, 1933, 1946, 2067, 2777-8
 - Seed production, 2784
 - Segregation, 6551
 - Selection, artificial, 1000, 5820, 5834-5
 - Stem, 998, 2068, 2753, 6551
 - Sterility, female, 4648
 - Sterility, fertility, 992, 4643-4, 6554
 - Sterility, male, 2756, 2772-3, 4628

Gossypium. Cotton—continued

Sylepta, 1948
 Synthetics, 213
 Taxonomy, 1021, 6575-6
Tetranychus, 6543
Thrips, 2793
 Translocation, 14, 4632
 Variation, 4668
 Varieties, 201, 216, 975, 1001-6, 1893, 1932, 2735, 2738, 2762, 2785, 4636-42, 4650, 4657, 5817, 6548, 6562-4
 Variety trials, 956, 960, 977-81, 1919-20, 1929, 2729-30, 2734, 2744-9, 2751-2, 2777, 2780, 4615, 4621, 4623, 4625, 5582, 6545-7, 6549
Verticillium, 1022-3, 1025-8, 2789-91, 4642, 4657-62, 5817, 5820-2, 5824-6, 5828-34, 5847, 5900-4, 5908, 6583
 Viruses, 2742
 Vitamins, 6567
 Water, effect of, 6551, 6570
 Wind, 2772
Xanthomonas, 958, 963, 1901, 1954, 2731-2, 3747, 4653, 5821, 5823, 5835, 5906, 6542, 6579
 Yield, 2063, 6577
 Gourd, *see Cucurbita*
 Graft hybridization, *see* hybridization, graft
 Grafting
 Aleurites. Tung, 3751
 Brassica, 3272
 Carya. Pecan, 4953
 Cucumis. Cucumber, 5182
 Cydonia. Quince, 1267, 6830
 Glycine. Soya bean, 7167
 Helianthus. Sunflower, 2929
 Lycopersicon. Tomato, 5221
 Malus. Apple, 2982, 4902, 6805, 6815
 Oryza. Rice, 3716
 Pinus. Pine, 1411, 5097
 Quercus. Oak, 3214
 Solanum. Potato, 4573
 Vitis, 1368, 1377, 3173-4, 5037
 Grain, *see* caryopsis and seed
 Grain shrivelling
 Triticum. Wheat, 6059
 Zea. Maize, 6210
 Grain splitting
 Zea. Maize, 5886
 Gram, *see* *Cicer*
 Grape, *see* *Vitis*
 Grapefruit, *see* *Citrus*
 Grasses
 Biotypes, 752
 Breeding, 186, 746-7, 749, 751, 2553, 2563, 3756, 4382, 4401-2, 5498
 Chromosome morphology, 4414
 Chromosome number, 4412-3, 6371
 Cold resistance, 756
 Combining ability, 4410
 Density of stand, 4352
 Fungi, 756
 Genetics, 1871
 Helminthosporium, 757-8
 Heterosis, 4350
 Hybridization, wide, 4364
 Legislation, 2564
 Light, effect of, 1871
 Migration, 2555
 Mixtures of crops or genotypes, 2558
 Photosynthesis, 4373
 Picloram, 6374
 Plant collections, 2562, 3686, 4417, 5561, 5579
 Pollination, 4415
 Polyploidy, 752, 4364
 Potassium, 753
 Quality, nutritive value, 754, 1869, 4416
 Seed production, 2563-4, 4384, 4415

Grasses—continued

Seed testing, 2561
 Selection, artificial, 4352
 Selection, natural, 2555
 Sodium, 753, 755
 Sterility, male, 1964
 Taxonomy, 752, 2560, 4414, 6371
 Temperature, effect of, 1871
 Variation, 1871, 2555, 4373
 Varieties, 1964, 2556-8, 4388
 Variety trials, 750, 2552, 4386-7, 4389
 Yield, 5486
 Greenhouse, *see* glass, cultivation under
 Groundnut, *see* *Arachis*
 Growth, *see* development
 Growth period
 Allium. Onion, 1510, 5720
 Arachis. Groundnut, 1310
 Avena. Oats, 195, 279, 3699, 3896
 Beta. Sugar beet, 2863
 Brassica. Cabbage, 3257, 3279
 Brassica. Cauliflower, 1887
 Brassica. Mustard for oil, 4788
 Brassica. Rape, 3756
 Cannabis. Hemp, 6587
 Capsicum, 1964
 Cereals, 5603
 Cichorium. Endive, 3298
 Crop plants, 2098
 Cucumis. Cucumber, 7088
 Dactylis, 2032, 4419-20, 6372
 Echinochloa, 6303
 Festuca, 5486, 6372
 Ficus. Fig, 6858
 Fragaria. Strawberry, 1353, 1964, 6895
 Fruit crops, 4873
 Glycine. Soya bean, 3399, 3407, 5287, 5191, 7168
 Gossypium. Cotton, 996, 1004, 1012, 1024, 1887, 1922, 1924, 1942-4, 2067, 2759, 2768-9, 2786, 4645, 6566-7, 6578
 Helianthus. Sunflower, 6753
 Hibiscus, 1955, 2807-9
 Hordeum. Barley, 279, 2028, 2429, 3896, 6260
 Lactuca. Lettuce, 3257
 Linum. Flax, 1035
 Linum. Linseed, 195, 4798, 4800
 Lolium, 6303, 6372, 6389
 Lupinus. Lupin, 2660, 4533
 Lycopersicon. Tomato, 1566, 1573, 1579, 1584, 1590, 2070-1, 3257, 3347-9, 3772, 5194, 5197-8, 5214, 5219, 7108, 7113
 Malus. Apple, 2980, 4886, 4889, 6802
 Mangifera. Mango, 3070
 Medicago, 829, 5550
 Nicotiana. Tobacco, 1141
 Oryza. Rice, 710, 714, 1849, 2501-2, 2545, 3720, 3798, 4320, 6346-7
 Persea. Avocado, 3098
 Phleum, 6372
 Picea. Spruce, 5107
 Pisum. Pea, 5730, 7193-4, 7196
 Poa, 195
 Populus. Poplar, 5067, 5069, 5071
 Prunus. Almond, 3079
 Prunus. Peach, 4933
 Pulses, 5603
 Pyrus. Pear, 6826
 Raphanus. Radish, 1865, 3257
 Ribes. Gooseberry, 3109
 Saccharum. Sugar cane, 4700
 Secale. Rye, 2137, 3896
 Solanum. Egg plant, 7128
 Solanum. Potato, 917-8, 2673, 4571, 6494, 6511-2
 Sorghum, for grain, 683, 4277-8
 Sorghum, for sugar, 4700

Growth period—*continued*

- Spinacia*. Spinach, 7055
- Stone fruits, 4873
- Trifolium*. Crimson clover, 4400
- Trifolium*. Red clover, 2639
- Trifolium*. Subterranean clover, 861
- Triticum*. Wheat, 208, 389–93, 1970, 2137, 2225, 3672, 3695, 3749, 3896, 3956, 3965–9, 5363, 5942, 5971, 5979, 6003, 6031–2, 6053
- Ulmus*. Elm, 1423
- Vicia*. Broad bean, 5526, 7133
- Vicia*. Vetch, 188–9, 6461–3
- Vitis*, 1391, 3169–72, 5011, 5035
- Zea*. Maize, 492, 552–3, 2326, 2372, 4136, 4169–72, 5515, 5885, 6007, 6181–2
- Zea*. Sweet corn, 4199

Guadua

Cytology, 809

Guava, *see* *Psidium*

Guilielma

Breeding, 1316

Gum

Cyamopsis, 1911–2

Gymnosperms

Fusicladium, 6985

Gymnosporangium

Malus. Apple, 2998

Gynecium, *see* flower

HABIT

- Arachis*. Groundnut, 6872
- Brassica*. Turnip, 4548
- Cynara*. Cardoon, 3271
- Dactylis*, 1873, 4419
- Glycine*. Soya bean, 5288
- Gossypium*. Cotton, 1842
- Leucaena*, 2029, 5078–80
- Lotus*. Birdsfoot trefoil, 2663, 6474
- Malus*. Apple, 2990
- Oryza*. Rice, 3718–9, 4320
- Phaseolus*, 3372, 7148
- Pinus*. Pine, 5055
- Pyrus*. Pear, 4856
- Salix*. Willow, 1465
- Triticum*. Wheat, 1977, 3960
- Vicia*. Vetch, 6463

Hairs

- Avena*. Oats, 465
- Gossypium*. Cotton, 4663
- Oryza*. Rice, 6368
- Thea*. Tea, 1157, 6706

Haploidy, 67, 3553

Saccharomyces, 5342

Solanum. Potato, 200, 895, 2676, 2683, 2696, 2698–9

Zea. Maize, 549, 2369, 6178

Harvesting

- Crop plants, 5482
- Cucumis*. Cucumber, 5183
- Eleusine*, 6304
- Gossypium*. Cotton, 2785, 3767
- Lycopersicon*. Tomato, 5199
- Malus*. Apple, 4862, 6813
- Ribes*, 5840
- Triticum*. Wheat, 420

Hawthorn, *see* *Crataegus*

Haynaldia

Hybridization, intergeneric, 3938, 3942

Meiosis, 3938

Hazel, *see* *Corylus*

Heading broccoli, *see* *Brassica*

Heat, drought resistance

- Arachis*, groundnut, 1312–3, 4967–8
- Avena*. Oats, 4066
- Beta*. Sugar beet, 1087
- Cenchrus*, 4418

Heat, drought resistance—*continued*

- Chloris*, 4418
 - Crataegus*, 6832
 - Crop plants, 2104, 3847
 - Cucumis*. Melon, 3306
 - Glycine*. Soya bean, 5295
 - Gossypium*. Cotton, 1024, 6578
 - Hordeum*. Barley, 2435
 - Lactuca*. Lettuce, 7063
 - Lycopersicon*. Tomato, 1586
 - Malus*. Apple, 4903
 - Oryza*. Rice, 206, 725, 2541
 - Panicum*, for grain, 2444
 - Phaseolus*, 229
 - Pinus*. Pine, 3232
 - Poa*, 762
 - Populus*. Poplar, 6968
 - Prunus*. Almond, 4959
 - Prunus*. Peach, 4932
 - Pseudotsuga*. Douglas fir, 5113
 - Secale*. Rye, 6057
 - Solanum*. Potato, 2669, 2714, 6520
 - Theobroma*. Cacao, 6719
 - Triticum*. Wheat, 1–4, 213, 399, 428, 2227, 3749, 3843, 3877, 4011–2, 6057–8
 - Zea*. Maize, 221, 4134
- Heat, effect of
- Gossypium*. Cotton, 5906
 - Hordeum*. Barley, 629, 650, 4212, 4220
 - Lycopersicon*. Tomato, 7096
 - Sorghum, 6310
- Height
- Avena*. Oats, 467
 - Carthamus*. Safflower, 4812
 - Coix*, 4347
 - Coriandrum*, 7202
 - Cucumis*. Melon, 1544
 - Eucalyptus*, 3208
 - Hordeum*. Barley, 4214, 4250, 6244
 - Lotus*. Birdsfoot trefoil, 4538
 - Malus*. Apple, 6773
 - Medicago*, 2614, 4485, 6423
 - Oryza*. Rice, 710, 2498, 3718, 4291, 4297–8
 - Pinus*. Pine, 6990
 - Prunus*. Cherry, 1283
 - Ricinus*. Castor oil plant, 6739
 - Sorghum*, 689, 2471, 4394
 - Triticum*. Wheat, 416, 3915
 - Zea*. Maize, 524, 538, 2331, 4172, 6128, 6155
- Helianthus*. Jerusalem artichoke
- Cell division, 7030
 - Hybridization, interspecific, 2928, 7029
 - Nucleic acids, 7030
 - Sterility, fertility, 2928
 - Variety trials, 5126
- Helianthus*. Sunflower
- Biochemistry, 1218
 - Breeding, 226, 1206, 4805, 6755
 - Colour, 1209, 2929
 - Epistasis, 4807
 - Fatty oil, 1210, 1213–5, 3631, 4808–11, 6753, 6755
 - Flower, 6754
 - Fungi, 1955, 5738
 - Rays, 2083
 - Grafting, 2929
 - Growth period, 6753
 - Heterosis, 1207
 - Hybridization, intergeneric, 4806
 - Hybridization, interspecific, 1216, 1887, 2928, 5738, 7029
 - Inbreeding, 1208, 4807, 6754
 - Linkage, 2931
 - Mutation, back, 2083
 - Mutation, spontaneous, 1209, 2929
 - Orobancha*, 1218, 5500, 5736–7
 - Pathology, 5738

Helianthus. Sunflower—continued

- Peronospora*, 6756
- Photoperiodism, 6757
- Plasmopara*, 5737
- Pollination, 1889
- Puccinia*, 3849, 4805, 5736
- Sclerotinia*, 5865
- Seed, 1212, 1215
- Segregation, 4807
- Sterility, fertility, 1208, 2928
- Sterility, male, 1211, 2931, 3472, 4807
- Taxonomy, 1216
- Variation, 1212
- Varieties, 1210, 1214, 2096, 2930, 4809–10
- Variety trials, 1975, 4804, 5505, 6753
- Verticillium*, 1217
- Water, effect of, 4811
- Yield, 1215

Heliothis

- Gossypium*. Cotton, 4664
- Zea*. Maize, 595, 4184, 4194, 6215–7

Helminthosporium

- Cocos*. Coconut, 205, 3087
- Grasses, 757–8
- Oryza*. Rice, 4291
- Papaver*. Poppy, 6722
- Saccharum*. Sugar cane, 2851
- Taxonomy, 758
- Triticum*. Wheat, 5660
- See also *Cochliobolus*, *Pyrenophora* and *Trichometasphaeria*

Hemileia

- Chromosome number, 4765
- Coffea*. Coffee, 2892, 2894, 4765, 4771, 6712, 6714–6
- Meiosis, 6716
- Physiological races, 2892, 4765

Hemitarsonemus

- Gossypium*. Cotton, 225

Hemizygosis

- Cucurbita*, 7081

Hemp, see *Cannabis*

Herbicides

- Fragaria*. Strawberry, 6894
- Gossypium*. Cotton, 4665
- Hordeum*. Barley, 2110, 3854, 3856
- Linum*. Flax, 1037, 2112–3, 3857
- Lolium*, 785
- Secale*. Rye, 6114
- Solanum*. Potato, 4608
- Sorghum*, for grain, 6373
- Triticum*. Wheat, 2111, 3855, 6055

Heredity, see genetics

Hermaphroditism

- Citrullus*. Water melon, 1547

Heterocaryosis, 3850

- Botrytis*, 259
- Pellicularia*, 1036
- Puccinia*, 4037

Heterochromatin

- Zea*. Maize, 545

Heterodera

- Avena*. Oats, 200, 480, 5934
- Beta*. Sugar beet, 2864, 5486, 5891
- β -Glucosidase, 942
- Glycine*. Soya bean, 1671, 2002, 5296–8
- Hordeum*. Barley, 652, 1865, 1875, 5934
- Hybridization, interspecific, 3686
- Physiological races, 4041, 4596, 4598–600, 5297–8, 5486, 5934, 6527
- Solanum*. Potato, 200, 915, 942, 2713–4, 3700, 4592–600, 5486, 5934, 6527–9
- Triticum*. Wheat, 4041

Heterosis, 43–5, 5377

- Allium*. Onion, 3331
- Astragalus*, 4539

Heterosis—continued

- Avena*. Oats, 1879, 6090
- Beta*. Mangel, 6478
- Beta*. Sugar beet, 1099, 6478, 6631
- Brassica*. Brussels sprouts, 3331
- Brassica*. Cabbage, 7045
- Cannabis*. Hemp, 1041
- Capsicum*, 1190, 2908, 3331
- Cereals, 5948
- Crop plants, 235, 1838, 2104, 3810, 5877, 6009
- Cucumis*. Cucumber, 3243, 3318, 3331
- Cucumis*. Melon, 3331
- Dactylis*, 4375
- Daucus*. Carrot, 3331
- Fagopyrum*. Buckwheat, 6084
- Festuca*, 787
- Gossypium*. Cotton, 994–5, 1024, 2767, 4629, 6553
- Grasses, 4350
- Helianthus*. Sunflower, 1207
- Hordeum*. Barley, 1979, 1998, 2406
- Lactuca*. Lettuce, 1887, 7061
- Lagenaria*, 1896
- Lycopersicon*. Tomato, 91, 3250, 3330–3, 3349, 3636, 3811, 5195–6
- Malus*. Apple, 4883
- Medicago*, 4377, 4502
- Melilotus*. Sweet clover, 6466
- Nicotiana*. Tobacco, 1131, 3811, 6645, 6676
- Onobrychis*. Sainfoin, 813
- Oryza*. Rice, 1849, 2503, 6331
- Papaver*. Poppy, 1176, 6722
- Raphanus*. Radish, 1503
- Ribes*. Black currant, 4852
- Ricinus*. Castor oil plant, 1201
- Secale*. Rye, 2295–6, 4088, 6108
- Solanum*. Egg plant, 3331, 5235
- Sorghum*, 1916, 4268, 4385, 4441, 6312–3, 6315
- Spinacia*. Spinach, 3331
- Thea*. Tea, 4759
- Theobroma*. Cacao, 2019
- Trifolium*. Red clover, 842, 4376
- Triticum*. Wheat, 340, 1906, 2168, 2172–4, 3928
- Vicia*. Broad bean, 3363
- Zea*. Maize, 525–30, 1833–4, 2007, 2332–3, 2343, 2378, 3811, 4131–40, 4145, 5548, 6127, 6148–51

Heterostyly

- Averrhoa*, 3096
- Fagopyrum*. Buckwheat, 6086
- Linum*. Flax, 1034
- Lycopersicon*. Tomato, 5190
- Pulmonaria*, 6765

Heterozygosis, 1758, 5376–7

- Allium*, 3267
- Hordeum*. Barley, 4218
- Nicotiana*. Tobacco, 3679
- Phaseolus*. Lima bean, 1632
- Saccharomyces*, 5340
- Secale*. Rye, 1815

Hevea. Rubber

- Breeding, 1225–6, 4832, 4836, 6766, 6768
- Dothidella*, 1228, 5544
- Pathology, 4834–5
- Sterility, male, 4837
- Varieties, 4833–4, 6769
- Variety trials, 1227, 6767

Hibiscus

- Chromosome morphology, 4686
- Chromosome number, 1050
- Colletotrichum*, 1051
- Flower, 2810
- Growth period, 1955, 2807–9
- Hybridization, intergeneric, 2807
- Hybridization, interspecific, 6592
- Meloidogyne*, 1052, 2004
- Photoperiodism, 2809, 2811

- Hibiscus*—*continued*
 Polyploidy, 6592
 Varieties, 1051
Hibiscus, as vegetable
 Colour, 5238
 Genetics, 5238
 Varieties, 3359
Hicoria, *see* *Carya*
Higginsia
Prunus. Cherry, 3040
Hilaria
 History and evolution, 798
 Hybridization, interspecific, 798, 3601
 Histology, *see* anatomy
 Histones, 3601
 History and evolution, 37, 46, 153, 1778
Aegilops, 1831, 3709, 4017
Agave, 6593
Avena. Oats, 1879, 4060–1, 6097–8
Beta. Sugar beet, 2856
Brassica. Cabbage, 7040
Brassica. Kale, 7040
Brassica. Kohl rabi, 7040
Brassica. Sprouting broccoli, 7040
Carthamus. Safflower, 6758
 Cereals, 3832
Citrus, 1896
Coffea. Coffee, 6712
Corchorus. Jute, 1045
Corynebacterium, 6436
Crataegus, 6831
 Crop plants, 253, 1830, 3833, 7237
Cucumis. Melon, 3307
Cucumis. Minor species, 7091
Cymbopogon, 2903
Dichanthium, 4438
Dioscorea. Yam, 1123
Eucalyptus, 5084–6
Euchlaena, 6127
Festuca, 2579, 2581, 4434, 6397
Ficus. Fig, 3693
 Forest trees, 5058
Fragaria. Strawberry, 1345, 1354, 4995
Garuga, 2938
Gossypium. Cotton, 1007, 1010
Hilaria, 798
Hordeum. Barley, 2414, 2438, 3866, 3893, 5954
 Leguminous forage crops, 4455
Linum. Flax, 6585
Lolium, 2581, 6383
Lycopersicon. Tomato, 3812, 5600
Malpighia, 4978
Malus. Apple, 2978
Medicago, 828
Musa. Banana, 5005
Nicotiana. Tobacco, 6703
Oryza. Rice, 712, 726, 4294, 4304, 6165, 6342–3
Oryzopsis, 4447
Panicum, 807
Persea. Avocado, 1448
Pinus. Pine, 6950
Populus. Poplar, 5087, 6967
Puccinia, 2146
Pyrus. Pear, 4908
Quercus. Oak, 3213, 6950
Rumex. Sorrel, 5159
Saccharum. Sugar cane, 4701, 6601
Salix. Willow, 3224, 5087
Secale. Rye, 6022
Solanum. Egg plant, 5236
Solanum. Potato, 926–7, 2695, 4556, 4569, 5600, 6505–8
Spartina, 4448
Stipa, 808
 History and evolution—*continued*
Triticum. Wheat, 330, 1831, 2212, 3625, 3707–8, 3865, 3893, 3957, 4017, 5465, 5546, 5662, 5954, 6022, 6024–5, 6030
Uromyces, 2146
Vitis, 3166, 5019, 6925–6
Zea. Maize, 543, 1833, 4163, 5600, 6165–8, 6183
See also evolution, general theory
 Homozygosis, 1797, 5378
 Hop, *see* *Humulus*
Hoplocampa
Malus. Apple, 6777
 Hopping quality, *see* quality
Hordeum. Barley
 α Rays, 612
 Adaptation, 6262
 Alkanesulphonic esters, 4221
 Alkylating agents, 4222
 Aminoacids, 6264
 Amphidiploidy, 609
 Anatomy, 5614
 Aneuploidy, 2419–20, 3868
 Arseno compounds, 4232
 Asynapsis, 632
 Back crossing, 3869
 Bacteria, 1963
 Biochemistry, 2138, 2408
 Breeding, 187, 195, 607, 1862, 1970, 2125, 2127, 2142, 2400, 2438, 3694, 3699, 3871, 3885, 3898, 4208, 6223, 6226, 6228, 6237, 6258, 6263
 Calcium, 645
 Caryopsis, 638, 1979, 6265
 Cell division, 628, 4239
 Chemicals, effect of, 115, 119, 141, 618, 2417, 3481, 3900, 4216, 6252
 Chlorophyll, 32
 Chromosome aberrations, 119, 629–31, 1817, 1821, 1855, 2415–8, 3481, 4230, 4232, 5424
 Chromosome fine structure, 4231
 Chromosome morphology, 4230
 Cleistogamy, 634
 Climate, 6237
Cochliobolus, 1973, 4252
 Cold resistance, 425, 1964, 2434, 4251, 6271
 Colour, 638, 2081, 4213, 6240
 Combining ability, 2402
 DDT, 6238
 Density of stand, 6270
 Development, 616, 2423, 4209, 4255
 Diethyl sulphate, 2130, 2416
 Dormancy, 633, 4215
 Enzymes, 5613
Erysiphe, 615, 622, 626, 647, 5486, 5500, 6264, 6272–6
 Ethyl methanesulphonate, 619, 631, 3890, 4223–5
 Ethyleneimine, 2081, 2130, 2409, 6252
 Flower, 610, 2403, 2423
 Fluorescence, 425
 5-Fluorodeoxyuridine, 1817, 1821
 Fungi, 1968, 3882, 5959
 γ Rays, 99, 130, 613, 2028, 2081–2, 2130, 2424, 4216, 6252
 Genetics, 615, 637, 644–7, 651, 1865, 1875, 1878, 1964, 1998, 2028, 2401–4, 2436, 2440, 3890, 4212–3, 4238, 4250, 4253, 5934, 6238–40, 6261, 6270, 6275, 6281–2
 Genome analysis, 200
Gibberella, 2145, 6277
 Growth period, 279, 2028, 2429, 3896, 6260–2
 Heat, drought resistance, 2435
 Heat, effect of, 629, 650, 4212, 4220
 Height, 4214, 4250, 6244
 Herbicides, 2110, 3854, 3856
Heterodera, 652, 1865, 1875, 5934
 Heterosis, 1979, 1998, 2406
 Heterozygosis, 4218
 History and evolution, 2414, 2438, 3866, 3893, 5954

Hordeum. Barley—continued

Hormones, 6111
Hybrid varieties, 2421
Hybridization, 1998, 2028, 2407, 6233, 6246
Hybridization, intergeneric, 460, 610, 3870, 6247
Hybridization, interspecific, 200, 609, 3870, 4252
Hybridization, wide, 6245
Inflorescence, 617, 637, 2404, 4225, 6239
Insecticides, 1865
Irrigation, 4249, 5522
Leaf, 1979
Ligule, 6266
Linkage, 608, 1875, 2439, 6242-4
Lodging, 5958, 6271
Lorox, 2418
Maleic hydrazide, 2147
Matrocliny, 611
Mayetiola, 2439, 6281-2
2-Mercaptoethylamine, 4239
Micurinism, 2429
Mixtures of crops or genotypes, 1847
Molecular genetics, 1788
Morphology, 6249
Multiple alleles, 6266
Multiple genes, 617
Mutation, 5534
Mutation, induced, 32, 92-3, 99, 115, 130, 141, 612-20, 629-30, 1855, 2004, 2081-2, 2125, 2130, 2408-9, 2424, 3812, 3890, 3900, 4214-25, 4238, 5538, 6251-3
Mutations, spontaneous, 2422, 6243, 6250
Neutrons, 614, 1817, 1821, 6253
Nitrogen, 265
Nitrosamines, 620
Nitrosoethylurea, 2409
Nutrients, 4243
Nucleic acids, 1788, 4231
Oscinella, 653, 5664
Oxygen, 630
Pathology, 3699, 5651, 6228
Phenoxyacetic acids, 2116
Photoperiodism, 2028, 2423, 4219, 4255, 5536
Photosynthesis, 2422, 4235
Plant collections, 4245-8
Plastids, 2422
Pollen, 1788
Pollination, 635, 4236
Polyploidy, 3686, 4234, 5534, 5538, 6111
Population genetics, 1798, 2407
Protein, 4241-3
Puccinia, 292, 651, 1896-7, 1963, 2147, 2438, 4253-4, 5926, 6264, 6269
Pyrenophora, 648, 1963, 5614, 5657
Quality, for malting and brewing, 640-4, 2405, 2426-30, 4205-6, 4240, 6231-2, 6234-5, 6267-8
Quality, nutritive value, 2425
Quantitative characters, 2125, 2435, 3896, 4219, 6269-70
Radiation, 90, 119, 2415-6, 3900, 4209, 4215, 5424
Rhynchosporium, 5486, 6280
Seed production, 2421
Segregation, 649, 4217, 5486
Selection, artificial, 2420, 4212, 6254
Selection, natural, 1798
Sowing, 2431, 3896, 6262
Statistics, experimental designs, 2128
Statistics, genetics, 608, 2439
Stem, 5958
Sterility, female, 5534
Sterility, fertility, 1964, 4224
Sterility, male, 607, 636, 2407, 2421, 3872, 4237, 6263
Stomata, 4239
Strontium, 645, 2432-3, 4256
Taxonomy, 4244, 6248-9
Temperature effect of, 629, 650
Thymidine, 628
Toxic soils, 3878

Hordeum. Barley—continued

Toxoptera, 4250
Translocation, 4233, 4254
Twinning, 2424, 4238
Typhula, 5962
Ustilago, 649-50, 1896, 1963, 2436-7, 5612-3, 5618, 5654, 5861, 6278-9
Variation, 6248-9, 6269
Varieties, 196, 199, 201, 203, 207, 240, 243, 265, 274, 276, 621-7, 1902, 2096, 2131-2, 2410-3, 2430, 3820, 3862-3, 4207, 4226-9, 5487, 5490, 5538, 5664, 5949, 6229-30, 6255-9, 6273, 7018
Variety Trials, 188, 213, 605-6, 1883, 2399, 2431, 3802, 3862-3, 4201-4, 4206, 4208, 4210-1, 4247, 5938-9, 5945, 5959, 6224-5, 6227, 6236
Viruses, 654-6, 1878, 1998, 2149, 2440, 3660, 5457, 6259, 6283
Water, effect of, 613, 2435
X rays, 614, 632, 2408, 4214
Yield, 4233, 5534, 6269
Hormones
Brassica. Mustard for oil, 5627
Hordeum. Barley, 6111
Lycopersicon. Tomato, 7106
Oryza. Rice, 4323
Secale. Rye, 6111
Vitis, 1374
Zea. Maize, 4135
Horse bean, *see Vicia*
Horseradish, *see Armoracia*
Humulus. Hop
Aphis, 2900
Biochemistry, 1181, 1184
Breeding, 1180, 1185
Cytology, 1182
Genetics, 1182, 2901
Pathology, 1182
Phytophthora, 2900
Polyploidy, 2026, 2900
Pseudoperonospora, 5870, 5914
Quality, for hopping, 1186, 2900
Selection, artificial, 1183, 4783, 5870
Sex, 2901
Sex chromosomes, 1752, 1808
Sphaerotheca, 1182
Stem, 4783
Varieties, 1179, 2026, 6776
Variety trials, 1183
Verticillium, 1179, 2900
Yield, 4783
Hydrazine, 1803
Lycopersicon. Tomato, 107
Hybrid necrosis
Triticum. Wheat, 4013
Hybrid varieties
Allium. Onion, 3262
Beta. Sugar beet, 1074-5, 1079, 1090, 1094, 1105, 2855, 2858, 4736, 5794
Brassica. Brussels sprouts, 3240, 3287, 3635
Brassica. Cabbage, 3275, 5145
Brassica. Rape, 1875
Capsicum, 234, 1498, 2906, 3635, 4827
Citrullus. Water melon, 1545, 5169, 7079
Crop plants, 235, 3827
Cucumis. Cucumber, 1496, 1553, 3299, 3317, 3635, 3810, 5177, 7016
Cucumis. Melon, 3303-6
Cynodon, 3759
Fagopyrum. Buckwheat, 4046
Forest trees, 5047
Hordeum. Barley, 2421
Lycopersicon. Tomato, 234, 1496, 1566-7, 1887, 1969, 3249, 3299, 3635, 3810, 5193-4, 7102-3
Medicago, 4468, 4495

Hybrid varieties—continued

Nicotiana. Tobacco, 4746
Oryza. Rice, 711
Pennisetum, for grain, 2447, 2450
Phalaris, 796
Populus. Poplar, 6964
Solanum. Egg plant, 1498
Sorghum, 668–74, 1837, 1899, 2460–3, 4263–7, 6311
Spinacia. Spinach, 221, 1236, 1535
Triticum. Wheat, 334–9, 2168–71, 3922–7, 3948, 5493, 5976–8
Vegetable crops, 1497, 5365
Vicia. Broad bean, 3367
Zea. Maize, 201, 212, 226, 497, 502–24, 568, 631, 647, 1887–8, 1893, 1959, 1965, 2003, 2011, 2104, 2317–20, 2322–31, 2368, 3515, 3751, 4110–27, 4143–4, 4187–8, 5504, 5524–5, 5675–7, 5683, 5942, 6118–21, 6131–40, 6147, 6209
Zea. Sweet corn, 600–1, 2396–7, 4198–9, 7016
Hybrid vigour, see Heterosis
Hybridization, 181
Amelanchier, 1296
Arachis. Groundnut, 1306
Avena. Oats, 463, 3786
Beta, 6477
Beta. Sugar beet, 1097, 1100, 4715, 4721
Betula. Birch, 5044
Brassica, 1900
Brassica. Kale, 1526
Capsicum, 2905, 3246, 4826, 6724
Cereals, 3889
Chrysanthemum, as insecticide, 2033
Citrullus. Water melon, 3245, 5117
Citrus, 4938
Cocos. Coconut, 205, 3086
Corchorus. Jute, 4684
Corylus. Hazel, 3077, 4957
Cucumis. Cucumber, 3246, 3248
Cucumis. Melon, 3302
Ditylenchus, 3682
Festuca, 2581
Fragaria. Strawberry, 4866
Glycine. Soya bean, 5290
Gossypium. Cotton, 985–9, 2757, 2773, 4004, 6569
Hordeum. Barley, 1998, 2028, 2407, 6233, 6246
Larix. Larch, 3237
Lolium, 2581
Lotus. Birdfoot trefoil, 878, 6472
Lycopersicon. Tomato, 1964, 5191–2
Malus. Apple, 2947
Musa. Banana, 5008
Nicotiana. Tobacco, 1147, 1794, 2007, 2872, 6659
Oryza. Rice, 2503–6, 2529, 3715, 3721, 4288, 4291, 4299, 4314, 6328, 6330
Pennisetum, for grain, 6302
Phaseolus, 1619, 3382
Picea. Spruce, 5044
Pinus. Pine, 1426, 5044
Populus. Poplar, 1447, 6964
Prunus. Cherry, 4922
Prunus. Plum, 2948
Ribes, 2950
Ribes. Black currant, 1339
Saccharum. Sugar cane, 1068, 2826, 4701
Secale. Rye, 484, 2004, 4090, 6113
Solanum. Egg plant, 3246, 3635
Solanum. Potato, 2682, 4551, 4554, 4579, 5689, 6492, 6495–6
Sorghum, 675, 1897, 1915, 2029, 2459, 6310
Theobroma. Cacao, 4780
Triticum. Wheat, 1993, 3920–1, 3977, 5611, 5639, 5642, 5644, 5649
Vegetable crops, 1495
Vicia. Broad bean, 1604
Vitis, 1366, 1377, 5015, 5742

Hybridization—continued

Zea. Maize, 500–1, 2004, 2348, 3748, 3751, 4177, 6143, 6146, 6169
Zea. Sweet corn, 599
Hybridization, graft
Benincasa, 5174
Beta. Sugar beet, 4716
Brassica. Brussels sprouts, 1532
Brassica. Cabbage, 1522, 1532, 1806
Capsicum, 2907
Cucumis. Melon, 5165
Cucurbita, 5165
Fagopyrum. Buckwheat, 6085
Gossypium. Cotton, 999, 1894, 2789, 5822
Juglans. Walnut, 1302
Lycopersicon. Tomato, 3585, 5209–10
Nicotiana. Tobacco, 3585
Onobrychis. Sainfoin, 1892
Pisum. Pea, 3412
Populus. Poplar, 1453
Secale. Rye, 3947
Solanum. Egg plant, 7127
Solanum. Potato, 3585
Trifolium. Red clover, 1892
Triticum. Wheat, 3947, 5841, 5878
Hybridization, intergeneric
Aegilops, 460, 1831, 2218, 3705–6, 3709, 3712, 3924, 3935–6, 3974, 4043–5, 5984–5
Agropyron, 114, 236, 268–9, 349, 443, 457, 2037, 2048, 2178, 2180–2, 3514, 3686, 3712–3, 3931, 3944, 4044, 5486, 5983, 5988, 5991–4
Alylosia, 1839
Bambusa, 2831
Benincasa, 5174
Cajanus, 1839
Citrus, 3063
Dichanthium, 799
Elymus, 3514, 5990, 6411
Euchlaena, 532, 1937, 2338, 4141, 5522
Festuca, 780, 1877, 2578, 3787, 4366–8, 4435, 6381, 6396
Fragaria. Strawberry, 6898
Gossypium. Cotton, 6557
Haynaldia, 3938, 3942
Helianthus. Sunflower, 4806
Hibiscus, 2807
Hordeum. Barley, 460, 610, 3870, 6247
Lolium, 200, 780, 1876–7, 2578, 3787, 4366–81, 4435, 6381, 6396
Lycopersicon. Tomato, 29, 1569, 5201, 7101, 7104
Malus. Apple, 6786
Pisum. Pea, 5304
Poncirus, 3063
Pyrus. Pear, 6786
Saccharum. Sugar cane, 1056, 2820, 2830–1, 4700
Secale. Rye, 248, 344–8, 2178–9, 3937–41, 4043, 4082, 5648, 5986–9, 6022, 6247
Sitanion, 6411
Solanum. Potato, 7104
Sorghum, for sugar, 4700
Theobroma. Cacao, 4776
Tripsacum, 533, 2321, 4141
Triticum. Wheat, 114, 188, 201, 236, 248, 268–9, 344–9, 443, 457, 1831, 2037, 2178–82, 2208, 2218, 3514, 3686, 3705–6, 3709, 3924, 3931, 3935–44, 3972–4, 4045, 4082, 5486, 5648, 5983–94, 6022
Vicia. Vetch, 5304
Zea. Maize, 532–3, 1056, 1937, 2321, 2338, 4141
Hybridization, interspecific, 46
Abies. Fir, 1489
Aegilops, 2271
Agave, 212, 2812, 6593
Agropyron, 2603–5, 2607, 3711–3, 4411, 4449–52, 6412
Aleurites. Tung, 6752
Arachis. Groundnut, 1307, 4785
Avena. Oats, 464–5, 1865, 1870, 2283–4, 4052, 5934

Hybridization, interspecific—continued

Axonopus, 6405
Beta, 200
Beta. Sugar beet, 5486, 5890-1
Belula. Birch, 1459, 6979
Brassica, 1518, 5140, 5593, 7039
Brassica. Kale, 2666
Brassica. Mustard for oil, 5627
Brassica. Rape, 5627, 6735
Brassica. Swede, 2666
Carthamus. Safflower, 6758-9
Cicer. Chickpea, 3423
Cichorium. Chicory, 1887
Cichorium. Endive, 1887
Citrullus. Water melon, 1546
Citrus. Mandarin, 3056, 6856
Coffea. Coffee, 1164-5, 2892, 4765, 6712
Corchorus. Jute, 1042-3, 1938-40, 2804-5, 4680, 4685, 6588
 Crop plants, 2038
Crotalaria, 6471
Cucurbita, 1551, 7081, 7083
Cucurbits, 5593
Cynodon, 767
Desmodium, 2029
Dichanthium, 799, 4438
Digitalis, 4820
Dioscorea. Yam, 1122-3
Echinochloa, 2451
Elymus, 2602
Eucalyptus, 1464, 5082, 6983
Festuca, 4366-7, 4411, 4435, 6396
Ficus. Fig, 3693
 Forest trees, 1393, 1395, 5058, 6959
Fragaria. Strawberry, 1345, 1348, 4995, 6898-9
Gossypium. Cotton, 236, 975, 991-3, 1003, 1009, 1025-6, 1894, 1900, 1918, 2733, 2758, 4631-3, 6553-7, 6564
Helianthus. Jerusalem artichoke, 2928, 7029
Helianthus. Sunflower, 1216, 1887, 2928, 5738, 7029
Hibiscus, 6592
Hilaria, 798
Hordeum. Barley, 200, 609, 3870, 4252
Ipomoea. Sweet potato, 6337
Juglans. Walnut, 2953
Juniperus, 3226
Larix. Larch, 3206, 5051, 5109, 7010
Lathyrus, 2943
Lespedeza, 2654
Lolium, 779-80, 2575, 2577, 4366, 4427
Lotus. Birdsfoot trefoil, 1864, 5538
Luffa, 1896
 4687
Lupinus. Lupin, 874
Lycopersicon. Tomato, 1568-9, 3334-5, 3636-8, 5198-200, 5228, 5234, 7101
Malus. Apple, 1246, 2996, 4878, 4884, 4901-2
Manihot. Cassava, 1953
Medicago, 2625, 3646, 4491, 5441
Melilotus. Sweet clover, 6465
Mentha, 5321, 5323
Nicotiana. Tobacco, 20, 1135-6, 2037, 2867, 2878, 3493, 3497, 3519, 3675, 3728, 4748-9, 4754, 5581, 580-3, 5806, 5808, 5899, 6654-5, 6657, 6663, 6668, 6677, 6696, 6698, 6700
Oryza. Rice, 712, 1849, 1894, 1903, 1953, 2477-8, 2502, 2507, 3722-3, 4300-2, 4316, 6331
Oryzopsis, 4447
Paspalidium, 2596
Paspalum, 3760
Pennisetum, 1839, 1917, 1936, 2448, 2597
Petasites, 1534
Phalaris, 795-6, 5555-6, 5572
Phaseolus, 126, 1624, 1843, 2004, 3374-5, 3510, 3626, 5258-9, 5466, 5593, 7142-4

Hybridization, interspecific—continued

Picea. Spruce, 1486, 7004
Pinus. Pine, 1417, 1427, 1467, 1860, 3227-8, 3231, 5091, 6991
Pisum. Pea, 2943, 7183
Poa, 200, 759, 3681
Populus. Poplar, 1430, 1449-51, 1454, 1458, 3216, 5039, 5066, 6953, 6965-8, 6972
Prunus. Almond, 1887, 3049, 3078, 3693, 6845, 6847
Prunus. Cherry, 1280, 2948, 4858, 6845
Prunus. Peach, 3049, 6845, 6847
Prunus. Plum, 1274, 2948, 4855, 4858
Pseudotsuga. Douglas fir, 3238
Pyrus. Pear, 3004, 5756, 5763
Quercus. Oak, 1442-3, 3213, 5063, 6960-1
Raphanus. Radish, 1861
Ribes, 2950, 4860-1
Ribes. Black currant, 5787
Ribes. Gooseberry, 5920, 6772
Rubus, 2950, 4852
Rubus. Blackberry, 1336, 6888
Rubus. Raspberry, 2941, 4842, 4980, 5538, 6888
Rumex. Sorrel, 5159, 7056
Saccharum. Sugar cane, 2821-2
Salix. Willow, 1465
Secale. Rye, 3679, 3684, 4081
Solanum. Potato, 200, 886, 895, 897-9, 902, 1841, 2669, 2683-5, 2701, 2713, 2943, 3686, 4555-8, 4597-8, 5693-4, 5700, 5934, 6497, 6523
Sorghum, 678, 1070, 2005, 4276, 4281, 4394, 4442, 6314, 6319
Sorghum, for sugar, 1070-1
Spartina, 4448
Theobroma. Cacao, 2895, 4773, 4775
Trifolium, 4395
Trifolium. Alsike clover, 841
Trifolium. Minor species, 2649
Trifolium. Red clover, 2635, 4506
Trifolium. Subterranean clover, 5577
Trifolium. White clover, 4506
Triticum. Wheat, 331, 342-3, 379, 426, 435, 1887, 2176-7, 3870, 3905, 3929-30, 3932-4, 3972-3, 3985, 5517, 5648, 5653, 5688, 5980-2, 6029, 6067
Ulmus. Elm, 5543
Ustilago, 6278
Vaccinium, 3647, 4842, 5442
Vicia. Vetch, 4365
Vigna. Cowpea, 3747
Vitis, 226, 1367-8, 1887, 3139, 3161, 3189, 5009, 5012, 5739, 5748, 5755, 5872, 5922, 6915
 Hybridization, wide
Agave, 6593
Gossypium. Cotton, 4630
 Grasses, 4364
Hordeum. Barley, 6245
Secale. Rye, 6247
Hydrellia
Oryza. Rice, 4291
 Hydrocarbons
Solanum. Potato, 2706
 Hydrogen fluoride
Lycopersicon. Tomato, 3346
 Hydroponics
Cucumis. Cucumber, 5186
Lycopersicon. Tomato, 1567, 1577
 Hydroxylamine, 129, 1786
Lycopersicon. Tomato, 107
Schizosaccharomyces, 3454
Triticum. Wheat, 3946
 Hydroxyurea
Vicia. Broad bean, 3597
Hypera
Medicago, 4461-6, 6443
Hypodermella
Pinus. Pine, 1480

Hypomyces

- Cucurbita*, 5173
 - Cucurbits, 3300, 7068
 - Fungicides, 7068
 - Genetics, 3300
 - Mutation, induced, 7068
 - Physiological races, 5173
 - Solanum*. Potato, 885, 889, 940, 2711
- Hypostasis, *see* epistasis

IDIOGRAM, *see* chromosome morphology

Immunology, *see* serology

Inbreeding, 47–8, 1758, 3538

- Agropyron*, 810
- Brassica*. Cabbage, 213
- Cucumis*. Cucumber, 3319
- Cucurbita*, 7080
- Daucus*. Carrot, 7024
- Forest trees, 5059
- Fragaria*. Strawberry, 2943
- Gossypium*. Cotton, 994–5, 2767
- Helianthus*. Sunflower, 1208, 4807, 6754
- Lactuca*. Lettuce, 5538
- Lespedeza*, 3762
- Lolium*, 3667, 5472
- Medicago*, 826, 1989, 4377, 4490
- Melilotus*. Sweet clover, 6466
- Nicotiana*. Tobacco, 1793
- Pennisetum*, for grain, 3490, 6291
- Pinus*. Pine, 1468
- Raphanus*. Radish, 1504
- Ribes*. Black currant, 2950
- Rubus*, 5538
- Secale*. Rye, 483
- Solanum*. Potato, 2676, 3700
- Sorghum*, for grain, 4271, 6313
- Zea*. Maize, 535, 566, 1907, 2339–41, 2357, 4142–8, 6152, 6191
- Zea*. Sweet corn, 2398

Incompatibility, *see* sterility, fertility

Indigofera

- Breeding, 4541
- Cytology, 4542
- Photoperiodism, 4541
- Plant collections, 4541
- Sterility, fertility, 4541
- Taxonomy, 4542

Indole-3-acetic acid

- Lycopersicon*. Tomato, 3681
- Pinus*. Pine, 1415
- Pisum*. Pea, 3419
- Vicia*. Broad bean, 160
- Zea*. Maize, 2378, 4139

Inflorescence

- Agropyron*, 2609
- Avena*. Oats, 469
- Gossypium*. Cotton, 2754
- Hordeum*. Barley, 617, 637, 2404, 4225, 6239
- Oryza*. Rice, 3725–6
- Pennisetum*, for grain, 6290, 6299
- Triticum*. Wheat, 2228, 3710, 3934
- Vitis*, 6934
- Zea*. Maize, 2353, 4157, 4166

Infrared rays

- Triticum*. Wheat, 451

Inheritance, *see* genetics

Inheritance of acquired characters

- Nicotiana*. Tobacco, 6681

Inhibitors, 8, 1714, 1775, 3429

- Saccharomyces*, 1715, 1719
- Schizosaccharomyces*, 1055
- Triticum*. Wheat, 2228, 3707–8
- Zea*. Maize, 2313

Insecticides

- Hordeum*. Barley, 1865
- Malus*. Apple, 6819
- Solanum*. Potato, 2724

Insects

- Brassica*, 7042
- Cannabis*. Hemp, 5840
- Crop plants, 261–2, 5632
- Cucurbits, 7069
- Forest trees, 1400, 1420, 1425
- Fruit crops, 5775
- Gossypium*. Cotton, 6541
- Malus*. Apple, 5777, 5915
- Oryza*. Rice, 2115
- Physiological races, 1425
- Pinus*. Pine, 5104
- Prunus*. Cherry, 5777
- Prunus*. Plum, 5777
- Triticum*. Wheat, 5633
- Zea*. Maize, 3779, 5681, 6214
- Zea*. Sweet corn, 224

Intensifiers, *see* modifiers

Interchange, *see* translocation

Interference, 6

Saccharomyces, 22

Intergeneric hybridization, *see* hybridization, intergeneric

Interspecific hybridization, *see* hybridization, interspecific

Introduction, plant, *see* plant collections

Inversion, *see* translocation

Ionole

- Allium*, 1818

Ipomoea. Sweet potato

- Alkaloids, 6764
- Carotene, 6538
- Ceratocystis*, 2728, 4612, 6540
- Chimeras, 3769
- Embryology, 6537
- Enzymes, 6540
- Fungi, 951
- Fusarium*, 3770, 4614
- Genetics, 2727, 4609
- Hybridization, interspecific, 6537
- Linkage, 6536
- Monilochaetes*, 4612
- Morphology, 6536
- Nitrogen, 3703
- Pathology, 951
- Plant collections, 4612
- Pollination, 2726, 4611
- Polyploidy, 6535
- Protein, 2033
- Quality, for canning, 2014
- Quality, for storage, 6539
- Quality, of edible product, 2727, 3768, 4609
- Rotylenchulus*, 952
- Segregation, 6535
- Sterility, fertility, 949, 4611, 6537
- Taxonomy, 4610
- Varieties, 948, 2725, 4610, 6538
- Variety trials, 947, 1563, 2014
- Yield, 950

Iron

- Lycopersicon*. Tomato, 5204
- Spinacia*. Spinach, 5158
- Zea*. Maize, 6211

Irrigation

- Beta*. Sugar beet, 6639
- Cereals, 283–4
- Dactylis*, 2028
- Glycine*. Soya bean, 3400
- Gossypium*. Cotton, 1024, 4652
- Hordeum*. Barley, 4249, 5522
- Medicago*, 834, 6432
- Nicotiana*. Tobacco, 1146
- Oryza*. Rice, 4328

Irrigation—continued

- Phaseolus*, 3383, 7149–50
- Solanum*. Potato, 2709, 4582
- Triticum*. Wheat, 2244, 3999–4000, 6021
- Zea*. Maize, 5677
- Isariopsis*
 - Phaseolus*, 5277
- Isoflavones
 - Trifolium*, 4509
 - Trifolium*. Subterranean clover, 2646
- Isothiocyanates
 - Brassica*. Rape, 4790
 - Brassica*. Turnip, 4790
- Isotopes, radioactive, *see* radioactive isotopes

JERUSALEM ARTICHOKE, *see* *Helianthus*

- Job's tears, *see* *Coix*
- Juglans*. Walnut
 - Biotypes, 1303
 - Cold resistance, 1299
 - Fatty oil, 6867
 - Hybridization, graft, 1302
 - Hybridization, interspecific, 2953
 - Land races, 6823, 6867
 - Pollination, 1299
 - Protein, 6867
 - Quality, nutritive value, 3074
 - Quality, of edible product, 1297
 - Varieties, 1300–1, 3073, 4951
 - Variety trials, 1297–8, 3072, 4967
- Jujube, *see* *Zizyphus*
- Juniperus*
 - Hybridization, interspecific, 3226
 - Sterility, fertility, 3226
- Juniper, *see* *Juniperus*
- Jute, *see* *Corchorus*

KABATIELLA

- Trifolium*. Red clover, 1970, 4517
- Kaki, *see* *Diospyros*
- Kale, *see* *Brassica*
- Kapok, *see* *Ceiba*
- Karyokinensis, *see* cell
- Karyology, *see* nucleus
- Karyotype, *see* chromosome morphology
- Keeping quality, *see* quality
- Kenaf, *see* *Hibiscus*
- Khushkia*
 - Zea*. Maize, 534
- Kidney bean, *see* *Phaseolus*
- Kinetochore, *see* centromere
- Knotgrass, *see* *Paspalum*
- Kohl rabi, *see* *Brassica*
- Kok saghyz, *see* *Taraxacum*, for rubber
- Kola, *see* *Cola*
- Kuehneola*
 - Rubus*. Blackberry, 2007

LACTIC DEHYDROGENASE

- Piricularia*, 743
- Lactuca*. Lettuce
 - Bremia*, 1539, 5926
 - Chromosome aberrations, 5160
 - Growth period, 3257
 - Heat, drought resistance, 7063
 - Heterosis, 1887, 7061
 - Inbreeding, 5538
 - Pollution, atmospheric, 6790
 - Sclerotinia*, 1540
 - Seed storage, 5160
 - Selection, artificial, 7061
 - Varieties, 240, 1538, 2091–2, 3251, 3292–4, 5114, 5599, 7062
 - Variety trials, 1537, 3290–1, 7057–61, 7063
 - Viruses, 1541, 3295

Lagenaria

- Asafetida, 7084
- Aulacophora*, 4688
- Heterosis, 1896
- Sex, 7084
- Land races
 - Cereals, 2135
 - Cynara*. Cardoon, 3271
 - Juglans*. Walnut, 6823, 6867
 - Onobrychis*. Sainfoin, 4528
 - Oryza*. Rice, 4314
 - Populus*. Poplar, 6971
 - Prunus*. Cherry, 3036
 - Pyrus*. Pear, 6823
 - Trifolium*. Red clover, 2637
 - Triticum*. Wheat, 3873, 3956
 - Vegetable crops, 3256
 - Vicia*. Vetch, 6459
 - Vitis*, 3165
 - Zea*. Maize, 2364–5
- Larch, *see* *Larix*
- Larix*. Larch
 - Aneuploidy, 3236–7
 - Breeding, 7009
 - Chromosome aberrations, 5048
 - Development, 3235
 - Ecotypes, 5049
 - γ rays, 3235, 5111
 - Geographical races, 7011–5
 - Hybridization, 3237
 - Hybridization, interspecific, 3206, 5051, 5109, 7010
 - Meiosis, 3235, 5048
 - Mutation, 5111
 - Mutation, spontaneous, 5110
 - Plastids, 5110
 - Pollen, 5111
 - Polyploidy, 3237
 - Sterility, fertility, 5111
 - Taeniothrips*, 5112
 - Variation, 5049–50
 - Water balance, 7015
- Lathyrus*
 - Hybridization, interspecific, 2943
 - α -Naphthylacetamide, 2943
- Lateness, *see* growth period
- Latex
 - Ficus*. Fig, 1290
- Lauryl alcohol
 - Vicia*. Broad bean, 1814
- Lavandula*
 - Essential oil, 6761
- Layouts, *see* statistics
- Leaf
 - Beta*. Mangel, 6633
 - Beta*. Sugar beet, 4722, 6633
 - Brassica*. Kale, 5149
 - Citrullus*. Water melon, 1545
 - Gossypium*. Cotton, 4634–5, 4649, 4663, 6550
 - Hordeum*. Barley, 1979
 - Lespedeza*, 2657
 - Lolium*, 6390
 - Malus*. Apple, 4882
 - Medicago*, 4501
 - Morus*. Mulberry, 4945, 6863
 - Nicotiana*. Tobacco, 3730, 6679
 - Onobrychis*. Sainfoin, 1980
 - Phaseolus*, 5522
 - Picea*. Spruce, 1482
 - Pinus*. Pine, 5091
 - Pisum*. Pea, 1686
 - Poa*, 760
 - Populus*. Poplar, 1447, 5066, 5087
 - Saccharum*. Sugar cane, 6602
 - Salix*. Willow, 5087
 - Thea*. Tea, 6709

Leaf—continued

Theobroma. Cacao, 6718

Vicia. Vetch, 6459

Vitis, 1379

Zea. Maize, 567–8, 6143

See also defoliation

Leek, see *Allium*

Legislation

Avena. Oats, 4059

Crop plants, 233, 246, 2103, 3805–7, 4843, 5937

Grasses, 2564

Lolium, 4428

Phaseolus, 5264

Pisum. Pea, 5309

Leguminous forage crops

Adaptation, 4454

Antibiotics, 819

Breeding, 223, 747, 812, 2553, 2610

Colour, 4455

Cytology, 6415

Flower, 4455

Fungi, 5726

History and evolution, 4455

Phytophthora, 820

Plant collections, 4417, 4457, 5561, 5579

Protein, 6414

Quality, nutritive value, 4416

Rhizobium, 814, 816, 819, 2630, 5567, 6415

Seed production, 2610

Uromyces, 5727

Varieties, 4388

Variety trials, 750

Lemon, see *Citrus*

Lens. Lentil

Ethyleneimine, 5319

Geographical races, 1695

Mutation, induced, 5319

Protein, 3630

Pseudomonas, 1695

Taxonomy, 1908

Varieties, 1908, 3426

Lentil, see *lens*

Leptinotarsa

Solanum. Potato, 4601, 6530

Leptosphaeria

Oryza. Rice, 1899

Triticum. Wheat, 431, 4022

Lespedeza

Geography, 2654

Hybridization, interspecific, 2654

Inbreeding, 3762

Leaf, 2657

Pollination, 2656, 4530

Rhizobium, 817

Seed, 3762, 4530

Taxonomy, 869, 2654

Variation, 2656

Varieties, 2655

Variety trials, 2657

Lespeyresia

Fruit crops, 5774, 5776

Lethal yellowing

Cocos. Coconut, 1330, 3092

Lethals

Medicago, 4486–7

Pisum. Pea, 7182

Saccharomyces, 23

Triticum. Wheat, 200, 331, 3918, 3932, 4013

Lettuce, see *Lactuca*

Leucaena

Breeding, 6981

Combining ability, 4409, 5079

Cytology, 6981

Genetics, 2029, 4409, 5078

Habit, 2029, 5078–80

Leucaena—continued

Mimosine, 2029, 6981

Quantitative characters, 4409

Variation, 5080

Specific chemical substances, 6981

Light, effect of

Allium. Onion, 1509

Cereals, 3889

Gossypium. Cotton, 2772

Grasses, 1871

Medicago, 220

Nicotiana. Tobacco, 6668, 6705

Triticum. Wheat, 1973

Zea. Maize, 3737

Ligule

Hordeum. Barley, 6266

Saccharum. Sugar cane, 4702

Lima bean, see *Phaseolus*

Lime, see *Citrus*

Linkage, 18, 48, 1765, 1776, 1778, 1785, 1796–7, 3551, 3552

3735, 5373–4

Brassica, 7038

Brassica. Kale, 5150

Brassica. Sprouting broccoli, 3286

Cereals, 3894

Fragaria. Strawberry, 1347

Gossypium. Cotton, 1011, 2755–6

Helianthus. Sunflower, 2931

Hordeum. Barley, 608, 1875, 2439, 6242–4

Ipomoea. Sweet potato, 6536

Lycopersicon. Tomato, 3328, 3502

Nicotiana. Tobacco, 6675

Oryza. Rice, 2477–8

Pisum. Pea, 1686, 2943, 3411, 7178–81

Saccharomyces, 1715, 3499; 5332

Solanum. Egg plant, 7126

Solanum. Potato, 2686

Sorghum, for grain, 679

Triticum. Wheat, 2167, 2253, 2256, 4016

Zea. Maize, 544, 559, 2389, 3509, 4109

Linseed, see *Linum*

Linum. Flax

Breeding, 195, 4670, 6584

Chromosome number, 2795

Fatty acids, 2795

Fungi, 5836, 5959

γ rays, 4672

Growth period, 1035

Herbicides, 1037, 2112–3, 3857

Heterostyly, 1034

History and evolution, 6585

Lodging, 2796

Melampsora, 3849, 4675, 5909

Mutation, induced, 4672

Polyspora, 5909

Quality, of fibre, 1032, 1035, 4673–4

Selection, artificial, 1031

Sterility, male, 1033

Taxonomy, 2795

Varieties, 1032, 1037, 2093, 2794, 2796, 4673–4, 5836

Variety trials, 4671, 5959

Water balance, 250

Linum. Linseed

Alternaria, 6749

Breeding, 195

Combining ability, 4799, 6747–8

Fatty oil, 4801–2

Fusarium, 6750

Genetics, 1205, 4798, 4803

Growth period, 195, 4798, 4800

Lodging, 4802

Melampsora, 200, 3849, 4802–3

Mycosphaerella, 3849, 4802

Phenoxyacetic acids, 2116

Sowing, 4800

Linum. Linseed—continued

- Sterility, male, 1205
- Varieties, 2926, 3802, 4801
- Variety trials, 1975, 4797
- Yield, 1900, 4798, 6748

Lithocarpus

- Quality of timber, 6982

Lodging

- Avena*. Oats, 2286, 4067, 6105
- Cereals, 5957

- Corchorus*. Jute, 2803

- Hordeum*. Barley, 5958, 6271

- Linum*. Flax, 2796

- Linum*. Linseed, 4802

- Oryza*. Rice, 736, 1849, 1894, 2542-3, 4291

- Secale*. Rye, 1754, 4093, 6113

- Sorghum*, for grain, 690

- Triticum*. Wheat, 429, 2191, 2249-51, 3905, 4014, 5958, 6033

- Zea*. Maize, 583, 4189

Lolium

- Amphidiploidy, 1864, 1874, 2007

- Aneuploidy, 2574-5

- Breeding, 187, 195, 2571, 4355

- Cellulose, 3799

- Chromosome morphology, 1870, 2581, 3594

- Chromosome number, 4362

- Colchicine, 3492, 6307

- Costelytra*, 6392

- Crossing over, 781

- Cytoplasmic inheritance, 4355

- Density of stand, 6391

- Development, 1863, 1873, 6390

- Fluorescence, 779

- Genetics, 779, 784, 1874, 4379

- Gloeotinia*, 187, 4379

- Growth period, 6303, 6372, 6389

- Herbicides, 785

- History and evolution, 2581, 6383

- Hybridization, 2581

- Hybridization, intergeneric, 200, 780, 1876-7, 2578, 3787, 4366-8, 4435, 6381, 6396

- Hybridization, interspecific, 779-80, 2575, 2577, 4366, 4427

- Inbreeding, 3667, 5472

- Leaf, 6390

- Legislation, 4428

- Mixtures of crops or genotypes, 2576, 6303

- Mutation, induced, 3492

- Nitrogen, 2565, 2576

- Nucleic acids, 6383

- Peroxidases, 6388

- Photoperiodism, 1863

- Photosynthesis, 1873

- Plant collections, 2028

- Pollination, 783

- Polyploidy, 782-3, 2092, 2570, 2581, 3643, 4362, 4429, 4435, 5438, 5486, 6384-7

- Population genetics, 6389

- Protein, 3622, 5462

- Puccinia*, 2577, 4432

- Quality, nutritive value, 4430-1

- Seed, 4362

- Seed production, 782, 1867, 2571

- Selection, artificial, 3643, 5438, 6390

- Statistics, cytology, 3594

- Sterility, fertility, 3787

- Sterility, male, 784, 6381, 6396

- Synthetics, 3667, 5472

- Taxonomy, 780, 2581, 4427

- Variation, 781, 4355

- Varieties 244, 2092, 2572-3, 4406, 4428, 5361, 6372, 6382

- Variety trials, 748, 1862, 2032, 2101, 2552, 2565, 2570, 2576, 4390, 4426, 6393

- Vernalization, 786

Lolium—continued

- Viruses, 1868, 1878

- Water balance, 6393

Longevity

- Medicago*, 2004, 4499, 6440

- Prunus*. Plum, 6840

Lophodermium

- Pinus*. Pine, 1408, 1428, 1435, 7000

Loquat, *see Eriobotrya*

Lorox

- Hordeum*. Barley, 2418

Lotus. Birdsfoot trefoil

- Chromosome number, 6473

- Cyanogenetic compounds, 2662, 3679, 4536, 6472

- Density of stand, 6474

- N-Dimethylaminosuccinic acid, 4538

- Genetics, 4535, 6472

- Habit, 2663, 6474

- Height, 4538

- Hybridization, 878, 6472

- Hybridization, interspecific, 1864, 5538

- Nucleolar body, 4535

- Polyploidy, 1864

- Quantitative characters, 2663

- Rhizobium*, 817-8

- Selection, natural, 3679

- Sterility, fertility, 879

- Sterility, self, 880, 2611

- Taxonomy, 4537, 6473

- Varieties, 2661

- Yield, 6474

Love grass, *see Eragrostis*

Lucerne, *see Medicago*

Luffa

- Aulacophora*, 4688

- Genetics, 1053, 1896, 4687

- Hybridization, interspecific, 1896, 4687

- Quantitative characters, 1053

- Sex, 1896

Lupin, *see Lupinus*

Lupinus. Lupin

- Alkaloids, 3684, 4456

- Breeding, 213, 4531-2

- Cold resistance, 4372, 4396-7

- Fertilization, sexual, 876

- Genetics, 1755, 4372, 4456

- Growth period, 2660, 4533

- Hybridization, interspecific, 874

- Micurinism, 2660

- Mutation, spontaneous, 3488

- Photosynthesis, 4533

- Polyploidy, 3664, 3686, 5469, 6469

- Sclerotinia*, 5629

- Shedding, 4398

- Sowing, 877

- Stemphylium*, 2004

- Sterility, fertility, 874

- Varieties, 875, 2003, 2659, 3694, 3763, 5361

- Variety trials, 6468

- Viruses, 4398, 6470

- X rays, 6469

Lycopersicon. Tomato

- Acridine, 1574

- Ammonium sulphate, 1597

- Aneuploidy, 24, 1578, 7109

- Ascorbic acid, 3637

- Biochemistry, 5195

- Breeding, 213, 226, 1592, 2951, 3347, 3353

- Calcium, 5203

- Carotenoids, 3638, 5200, 7097

- Chemicals, effect of, 1572

- Chlorophyll, 5218

- Chromosome aberrations, 3346

- Chromosome, fine structure, 5201

- Chromosome number, 24

Lycopersicon. Tomato—continued

Chromosome substitution, 7109
Cladosporium, 1588-9, 2106, 5229, 5538, 5926, 7119
Climate, 3330
Colour, 1964, 3329, 5538
Combining ability, 3330, 5197, 7100
Corynebacterium, 205, 3353
Development, abnormal, 7106
Epistasis, 5195
Ethyl methanesulphonate, 110, 5206
Ethyleneimine, 2071
Flower, 1581
Fruit, 1887, 5222
Fungi, 5228, 5500
Fusarium, 5231-2, 7120-2
 γ rays, 104, 2069-71, 5188, 5208, 5551
Genetics, 1565, 1579, 1582, 1585, 1594-5, 1887, 1964, 3328-9, 3333, 3348, 3354-5, 3638, 3681, 5114, 5190, 5218, 5225, 5229, 5538, 7097-9, 7106, 7118, 7119-20
Gibberellins, 1581, 5190
Glass, cultivation under, 5215, 5224
Grafting, 5221
Growth period, 1566, 1573, 1579, 1584, 1590, 2070-1, 3257, 3347-9, 3772, 5194, 5197-8, 5214, 5219, 7108, 7113
Harvesting, 5199
Heat, drought resistance, 1586
Heat, effect of, 7096
Heterosis, 91, 3250, 3330-3, 3349, 3636, 3811, 5195-6
Heterostyly, 5190
History and evolution, 3812, 5600
Hormones, 7106
Hydrazine, 107
Hybrid varieties, 234, 1496, 1566-7, 1887, 1969, 3249, 3299, 3635, 3810, 5193-4, 7102-3
Hybridization, 1964, 5191-2
Hybridization, graft, 3585, 5209-10
Hybridization, intergeneric, 29, 1569, 5201, 7101, 7104
Hybridization, interspecific, 1568-9, 3334-5, 3636-8, 5198-200, 5228, 5234, 7101
Hydrogen fluoride, 3346
Hydroponics, 1567, 1577
Hydroxylamine, 107
Indole-3-acetic acid, 3681
Iron, 5204
Linkage, 3328, 3502
Matrocliny, 5202
Meloidogyne, 1238, 1897, 5935, 7118
Miçurinism, 3334, 5713, 6012
Mutation, 1570, 3649, 5203-4, 5216, 5444, 7106
Mutation, induced, 91, 104, 107, 110, 1571-4, 1755, 2041, 2069-71, 3328, 3336-7, 3812, 5206, 5208, 5551
Mutation, spontaneous, 5207
Neutrons, 1753
Nutrients, 1589, 3330, 5192
Parthenocarpy, 3684
Pathology, 1585, 7117
Pectin, 7098
Photosynthesis, 5218
Phytophthora, 200, 3684, 5711-4, 5227, 5893
Plastids, 3336, 5207
Pollination, 3334, 3350, 5220
Pollution, atmospheric, 6790
Polyploidy, 5217, 7110, 7112
Protoparce, 2007
Pseudomonas, 5225
Quality, for canning, 1583-4, 1887, 5199, 5214, 7115
Quality, for storage, 3351
Quality, for transporting, 5222
Quality, nutritive value, 1566, 1582, 1753, 3335, 7098-9, 7114-5
Quality, of edible product, 1565, 3352, 3636, 7100
Radiation, 91, 1573, 1753, 3328
Radioactive isotopes, 2069
Seed production, 3299

Lycopersicon. Tomato—continued

Segregation, 29, 5210
Selection, artificial, 2943, 5712
Septoria, 1587
Size, 7100
Sowing, 5196
Statistics, experimental designs, 1564
Sterility, fertility, 5206, 7101
Sterility, male, 1580, 5191
Stomata, 3337
Sugar, 5223
Temperature, effect of, 1595-6
Tetranychus, 7123
Texture, 7099
Tissue culture, 105
Variation, 7105
Variegation, 3649, 5444
Varieties, 223, 1238, 1500, 1575-7, 1970-1, 3251, 3253-4, 3338-45, 5114, 5211-5, 5543, 7107-8, 7111, 7119
Variety trials, 206, 1556-63, 1593, 2945, 3326, 3352, 5187, 5193, 7092-5, 7113-4, 7118
Verticillium, 1590, 1965, 5232, 5715
Viruses, 1591-6, 2943, 3354-5, 3802, 5233-4, 5500, 5893, 5926, 6008
X rays, 24, 1571, 3327, 7096
Xanthomonas, 5226
Zinc, 1596
Lysenkoism, *see* Miçurinism
Lysine
 Micrococcus, 1701
 Zea. Maize, 572, 6125

MACADAMIA
 Fatty oil, 2017
 Variety trials, 2017
Mace, *see* *Myristica*
Macrophomina
 Corchorus. Jute, 2803
 Solanum. Potato, 2714
Macrosiphum
 Physiological races, 1612
 Vicia. Broad bean, 1612
Magnetism, effect of
 Allium. Onion, 1811
 Brassica. Rape, 1753
 Triticum. Wheat, 1753
Maize, *see* *Zea*
Male sterility, *see* sterility, male
 Maleic hydrazide
 Hordeum. Barley, 2147
 Oryza. Rice, 16
 Triticum. Wheat, 2147
Malpighia
 Cell division, 4978
 Chromosome number, 4978
 History and evolution, 4978
Malting quality, *see* quality
Malus. Apple
 Aging, 4884
 Apomixis, 4890
 Aspidiotus, 5772
 Back crossing, 4903
 Breeding, 2951, 2964, 2995, 6772, 6802
 Carbon dioxide, 6811
 Cold resistance, 1256-8, 2076, 2962, 2991, 4888, 4901-2, 5432, 6814
 Colour, 1262, 4882
 Copper, 4900
 Cuttings, 5432
 Development, 1242, 1252-3, 2979
 Dominance, 4884
 Dormancy, 1258
 Embryo sac, 4891
 Enzymes, 1257, 2993, 5771
 Epidermis, 5762

Malus. Apple—continued

- Fertilization, sexual, 4890
- Flower, 2983
- Fruit, 2983-4, 4885, 4888, 5762
- Fungi, 4880, 5916-7
- Fungicides, 6793
- γ rays, 2076, 4891, 4904
- Genetics, 200, 2996, 4881-2, 5757, 5759, 5761, 5764, 5767
- Geographical races, 2977, 6801
- Gibberellins, 6786
- Gloeosporium*, 6775
- Grafting, 2982, 4902, 6805, 6815
- Growth period, 2980, 4886, 4889, 6802
- Gymnosporangium*, 2998
- Habit, 2990
- Harvesting, 4862, 6813
- Heat, drought resistance, 4903
- Height, 6773
- Heterosis, 4883
- History and evolution, 2978
- Hoplocampa*, 6777
- Hybridization, 2947
- Hybridization, intergeneric, 6786
- Hybridization, interspecific, 2996, 4878, 4884, 4901-2, 5773
- Insecticides, 6819
- Insects, 5773, 5777, 5915
- Leaf, 4882
- Manganese, 1259
- Matrocliny, 4885
- Mercuran, 2085
- Miçurinism, 5771
- Morphology, 6807
- Mutation, 6773, 6795
- Mutation, induced, 87, 1963, 2076, 3754
- Mutation, somatic, 1236, 1250, 4886
- Nitrogen, 1253
- Nutrients, 5916
- Oxygen, 6811
- Pathology, 5762, 5767
- Peroxidases, 2993
- Phenyl mercury acetate, 6809
- Phosphorus, 1253
- Plant collections, 6791
- Podosphaera*, 1261, 2992-3, 4904, 5769-71
- Pollen, 2982, 6806
- Pollination, 2981, 4884, 6803-4
- Polyploidy, 1251, 2085, 6773
- Pruning, 1242, 4894-7
- Psylla*, 6777-8
- Quality, for canning, 2989, 6812
- Quality, for freezing, 2959
- Quality, for storage, 1254, 2986-8, 4893, 6810-1
- Quality, nutritive value, 6808-9
- Quality, of edible product, 2985, 4864
- Quantitative characters, 200
- Radiation, 87, 1963, 3754
- Rhopalosiphum*, 6778
- Sappaphis*, 6777-8
- Sclerotinia*, 6815
- Size, 4885, 4888
- Sphaeropsis*, 2999, 5758, 5765
- Spines, 4892
- Sterility, fertility, 4891
- Sterility, male, 1246
- Sterility, self, 2981
- Sugar, 2977
- Taxonomy, 1251, 6807
- Triiodobenzoic acid, 2979
- Varieties, 1247-51, 2002, 2947, 2966-76, 4887-8, 5765, 6796-800, 6814
- Variety trials, 1244-5, 2963, 2965, 6791, 6794
- Vegetative reproduction, 2958, 2965
- Venturia*, 2994, 2996-7, 3686, 5757-9, 5761, 5764, 5783, 6816, 6817

Malus. Apple—continued

- Viruses, 2961, 3000-3, 4862, 6818
- Yield, 2990, 4886, 4898-9, 5501
- Malvidin
- Solanum*. Potato, 2943
- Malvin
- Vitis*, 1378, 3190
- Mandarin, *see Citrus*
- Manganese
- Apium*. Celery, 3297
- Malus*. Apple, 1259
- Vitis*, 3139
- Mangel, *see Beta*
- Mangifera*. Mango
- Breeding, 1844
- Growth period, 3070
- Polyembryony, 4949
- Sex, 6864
- Temperature, effect of, 6864
- Tetranychus*, 4950
- Varieties, 4948
- Variety trials, 2016
- Mango, *see Mangifera*
- Mangold, *see Beta*
- Mangosteen, *see Garcinia*
- Manihot*. Cassava
- Cyanogenetic compounds, 1120
- Hybridization, interspecific, 1953
- Taxonomy, 1121
- Viruses, 205, 5527, 6644
- Manioc, *see Manihot*
- Manures, *see* nutrients
- Maple, *see Acer*
- Marasmius*
- Theobroma*. Cacao, 5544
- Marrow, *see Cucurbita*
- Marssonina*
- Populus*. Poplar, 1407, 3220
- Maternal inheritance, *see* matrocliny
- Mathematics, 83-4, 183, 1766, 3617, 5373, 5408
- Matricaria*
- Azulene, 4821
- Essential oil, 4821
- Polyploidy, 4821
- Matrocliny, 5367
- Brassica*, 1519, 5142
- Brassica*. Swede, 6481
- Gossypium*. Cotton, 996
- Hordeum*. Barley, 611
- Lycopersicon*. Tomato, 5202
- Malus*. Apple, 4885
- Raphanus*. Radish, 5142
- Saccharum*. Sugar cane, 6603
- Triticum*. Wheat, 5996
- Zea*. Maize, 1896, 2343, 2347, 4150
- Maturation period, *see* growth period
- Mayetiola*
- Hordeum*. Barley, 2439, 6281-2
- Triticum*. Wheat, 455
- Meadow grass, *see Poa*
- Medicago*
- Acclimatization, 822
- Acyrtosiphon*, 2631
- Ascochyta*, 3756
- Bacteria, 3756
- Boron, 6413
- Breeding, 195, 213, 838, 2008, 2630, 4474-9, 4491, 6420, 6439
- Chlorophyll, 4487
- Chromosome number, 828
- Cold resistance, 220, 835, 4470, 4504, 5558, 5575, 6433
- Colour, 823, 4483
- Combining ability, 825, 2616, 4359, 5486, 6424-5, 6430-1, 6435
- Corynebacterium*, 4473, 6434-6

Medicago—continued

- Coumestrol, 837
- Density of stand, 2616, 3668-9, 5473-4
- Ditylenchus*, 4472-3, 6434, 6441-2
- Ecotypes, 1887, 2620
- Estrogens, 6424
- Fertilization, sexual, 2621
- Flower, 3756
- Fungi, 6438
- Genetics, 823, 1994, 2028, 2614, 2625, 3756, 4380, 4409, 4482-7, 4501, 4505, 5558, 5573-5, 6421-3
- Germination, 6433
- Growth period, 829, 5550
- Height, 2614, 4485, 6423
- Heterosis, 4377, 4502
- History and evolution, 828
- Hybrid varieties, 4468, 4495
- Hybridization, interspecific, 2625, 3646, 4491, 5441
- Hypera*, 4461-6, 6443
- Inbreeding, 826, 1989, 4377, 4490
- Irrigation, 834, 6432
- Leaf, 4501
- Lethals, 4486-7
- Light, effect of, 220
- Longevity, 2004, 4499, 6440
- Micurinism, 3746
- Mutation, 3756
- Mutation, induced, 5550
- Nematodes, 6440
- Pathology, 2629
- Peronospora*, 4505
- Phoma*, 3756
- Phytophthora*, 836
- Plant collections, 2101, 4502, 6438
- Plastids, 4482
- Plenodomus*, 1961
- Pollen, 6413
- Pollination, 4359, 4500
- Polyploidy, 2625, 3646, 5441, 6428
- Protein, 835, 1992, 2626-7, 4469
- Pseudopeziza*, 837
- Quality, nutritive value, 832-3, 1992, 2619, 4467, 6422, 6425
- Quantitative characters, 3668-9, 5473-4
- Rhizobium*, 815-9, 2028, 2630, 6437
- Root, 229, 831, 2028, 4471
- Saponin, 4369
- Seed, 1994, 4484
- Seed production, 4503
- Seedlings, 4497-8
- Selection artificial, 2628
- Serology, 2632
- Sterility, fertility, 830, 2622-3, 4377, 6430
- Sterility, male, 2625, 4359
- Sterility, self, 1989, 2611, 2624, 4473, 6431
- Synthetics, 824, 2096, 2615, 4488-9, 4492
- Taxonomy, 4457, 4502
- Temperature, effect of, 220
- Therioaphis*, 2631
- Uromyces*, 837
- Variation, 2615, 5550
- Varieties, 827, 2617-9, 4474, 4493-6, 6426-7
- Variety trials, 821-2, 2612-3, 4459-60, 4479-81, 6416-9, 6432
- Verticillium*, 195, 838, 4380, 6439
- Yield, 1989, 2628, 3668, 5474
- Meiosis, 25, 38, 163, 1750, 1769, 1816, 3602, 5413, 5422
- Aegilops*, 3936
- Agropyron*, 4452
- Aleurites*. Tung, 6752
- Allium*, 5135
- Annona*, 1294
- Areca*, 3083
- Armoracia*. Horseradish, 2941
- Avena*. Oats, 2281, 2283, 6099

Meiosis—continued

- Beta*. Sugar beet, 4718
- Brassica*. Rape, 4789
- Capsicum*, 2910
- Cocos*. Coconut, 3085
- Coffea*. Coffee, 1164, 2892
- Corchorus*. Jute, 2804
- Crotalaria*, for fibre, 1049
- Cucurbita*, 7081
- Cynodon*, 769
- Dactylis*, 1756
- Daucus*. Carrot, 2941
- Gossypium*. Cotton, 1008, 1918
- Grasses, 10
- Haynaldia*, 3938
- Hemileia*, 6716
- Larix*. Larch, 3235, 5048
- Oryza*. Rice, 1853, 6344
- Panicum*, 6285
- Pennisetum*, 2449, 6297
- Pennisetum*, for grain, 1936, 6297
- Phaseolus*, 3374, 7142
- Picea*. Spruce, 1484-5
- Pinus*. Pine, 1474
- Pisum*. Pea, 3415, 3645
- Prunus*. Cherry, 3037
- Prunus*. Plum, 2948, 3022
- Punica*. Pomegranate, 1903
- Rumex*. Sorrel, 5159
- Saccharomyces*, 22, 3450, 3499
- Saccharum*. Sugar cane, 2830
- Secale*. Rye, 1815, 3645, 3938, 4085
- Sorghum*, 1070, 2466, 4276
- Sorghum*, for sugar, 1070-1
- Tripsacum*, 2321
- Triticum*. Wheat, 377-8, 398, 2215-6, 3936, 3938, 3945, 3959
- Vicia*. Broad bean, 161
- Zea*. Maize, 2321, 2350, 3645, 4164-5, 5423, 6174
- Zingiber*. Ginger, 162
- Melampsora*
- Linum*. Flax, 3849, 4675, 5909
- Linum*. Linseed, 200, 3849, 4802-3
- Physiological races, 4675, 4803
- Pinus*. Pine, 1412, 7003
- Populus*. Poplar, 1410, 1418, 1451, 3218, 6974-5
- Melanocallis*
- Carya*. Pecan, 1295
- Melanophila*
- Populus*. Poplar, 6976
- Melezitase
- Saccharomyces*, 12
- Melicocca*
- Varieties, 6877
- Melilotus*. Sweet clover
- Chromosome morphology, 871
- Colchicine, 873
- Coumarin, 2658, 4370, 4456
- Development, abnormal, 6467
- Embryo, 872
- Emposca*, 881
- Genetics, 2658, 3756, 4370-1
- β -Glucosidase, 870, 4371
- Glucosides, 870
- Heterosis, 6466
- Hybridization, interspecific, 6465
- Inbreeding, 6466
- Mutation, induced, 870
- Pleiotropy, 6467
- Pollination, 4370
- Polyploidy, 872-3
- Sitona*, 1968
- Meloidogyne*
- Arachis*. Groundnut, 5935
- Crotalaria*, for fibre, 5935

Meloidogyne—continued
Glycine. Soya bean, 1006, 1672
Hibiscus, 1052, 2004
Lycopersicon. Tomato, 1238, 1897, 5935, 7118
Nicotiana. Tobacco, 4757, 5935
Prunus. Peach, 1239
Solanum. Egg plant, 5237
Solanum. Potato, 4595
Trifolium. White clover, 860
Melon, *see Citrullus*
Melon, *see Cucumis*
Mendelism, *see* genetics
Mentha
Chromosome, fine structure, 5324
Essential oil, 1697, 7204
 γ rays, 5321
Genome analysis, 5322–3
Hybridization, interspecific, 5321, 5323
Mutation, somatic, 1697
Polyploidy, 5324
Puccinia, 7204
Sterility, male, 5324
Varieties, 2093, 7203
Variety trials, 5320
2-Mercaptoethylamine, 133–4
Hordeum. Barley, 4239
Mercuran
Malus. Apple, 2085
Pyrus. Pear, 2085
Methoxyamine, 1786
Methyl methanesulphonate
Sorghum, for grain, 680
Methylazoxymethanol, 140
Micrococcus
Lysine, 1701
Mutation induced, 1701–3
Microorganisms, 1700, 3464
Selection, artificial, 3430
Miçurinism, 3587
Avena. Oats, 4054
Beta. Sugar beet, 1077
Corylus. Hazel, 4957
Crop plants, 3824
Gossypium. Cotton, 4004, 6011, 6569
Hordeum. Barley, 2429
Lupinus. Lupin, 2660
Lycopersicon. Tomato, 3334, 5713, 6012
Malus. Apple, 5771
Medicago, 3746
Prunus. Almond, 6845
Prunus. Cherry, 6845
Prunus. Peach, 6845
Pulses, 5603
Secale. Rye, 345, 6108
Triticum. Wheat, 345, 356, 2225, 3672, 3695, 5468, 6003, 6020, 6053
Vitis, 6928–30
Zea. Maize, 581, 2339, 4146–7, 4174, 5713, 6187–8
Migration
Grasses, 2555
Millet, *see Echinochloa*, *Eleusine*, *Panicum*, *Pennisetum* and *Setaria*
Milling quality, *see* quality
Mimosine
Leucaena, 2029, 6981
Mint, *see Mentha*
Mitochondria
Saccharomyces, 1722, 3449
Zea. Maize, 525, 6124, 6169
Mitomycin-C
Glycine. Soya bean, 1646
Mitosis, *see* cell division
Mitotic recombination, 3487, 7215
Saccharomyces, 1716, 5333, 7215
Mitotic segregation, *see* mitotic recombination

Mixoploidy, 3482
Mixtures of crops or genotypes
Avena. Oats, 2285, 6105
Coix, 4348
Cynodon, 6379
Dactylis, 6375
Echinochloa, 6303
Glycine. Soya bean, 1662, 3401, 5285, 5294
Grasses, 2558
Hordeum. Barley, 1847
Lolium, 2576, 6303
Oryza. Rice, 1847
Phleum, 195
Pisum. Pea, 179
Secale. Rye, 487
Solanum. Potato, 2710, 6491
Trifolium. Red clover, 5492
Triticum. Wheat, 1847
Vicia. Broad bean, 3367
Zea. Maize, 522, 1662, 4145, 5294
Modifiers
Oryza. Rice, 3720
Zea. Maize, 28, 2312–3, 2316, 2349, 2351–2, 3496, 4107, 6129–30
Molecular genetics, 49–65, 69–75, 131, 138–9, 1740–1, 1779–82, 1784–7, 1789–90, 3457, 3517, 3522, 3530, 3532–3, 3558–63, 3799, 5379–90, 5392–3, 5545, 5562
Allium, 174
Hordeum. Barley, 1788
Nicotiana. Tobacco, 1788
Saccharomyces, 3508, 7216–7, 7221
Vicia. Broad bean, 1783, 3570, 5394
Viruses, 3683
Zea. Maize, 6153
Momordica
Polyploidy, 1552
Monilia, *see Sclerotinia*
Monilinia, *see Sclerotinia*
Monilochaetes
Ipomoea. Sweet potato, 4612
Monocrotaline
Crotalaria, 4822
Monogerm seed balls
Beta. Sugar beet, 1079, 1086, 1095, 1112–4, 1116, 3685, 3815, 4714, 4728–33, 5487
Monoploidy, *see* Haploidy
Monosomics, *see* Aneuploidy
Morphine
Papaver. Poppy, 1178
Morphology
Avena. Oats, 6100
Brassica. Cabbage, 1806
Brassica. Sarson, 6733
Coffea. Coffee, 6713
Coix, 6370
Hordeum. Barley, 6249
Ipomoea. Sweet potato, 6536
Malus. Apple, 6807
Oryza. Rice, 6350, 6356, 6359–60
Picea. Spruce, 1487
Vaccinium, 1341
Zea. Maize, 4138
Morus. Mulberry
Aminoacids, 4945
Genetics, 6861
Leaf, 4945, 6863
Polyploidy, 3066, 6861
Quality, nutritive value, 3067, 6862–3
Sex, 1293
Variety trials, 1292, 6860
Mulberry, *see Morus*
Multiple alleles, 3548
Gossypium. Cotton, 6559
Hordeum. Barley, 6266

Multiple alleles—*continued*

- Nicotiana*. Tobacco, 6674
Raphanus. Radish, 7028
Saccharomyces, 3518
Thea. Tea, 4761
Triticum. Wheat, 3708
 Multiple genes, 3549
Hordeum. Barley, 617
Nicotiana. Tobacco, 1130
Oryza. Rice, 3725
Pinus. Pine, 5103
Zea. Popcorn, 604
Musa. Banana
 Biochemistry, 5007
 Breeding, 4866, 6910
 Colour, 1363
 Fungi, 5007
 Genetics, 1363, 5008
 Genome analysis, 5006
 History and evolution, 5005
 Hybridization, 5008
 Mycosphaerella, 5008, 6911–2
 Polyploidy, 5005
 Pseudomonas, 2105
 Sterility, fertility, 5005
 Taxonomy, 1926, 5006, 6910
 Translocation, 3135
 Varieties, 6910
 Mushroom, *see Agaricus*
 Musk melon, *see Cucumis*
 Mustard as vegetable, *see Brassica*
 Mustard for oil, *see Brassica*
 Mutation, 78, 88, 96, 132, 1768, 3531, 3545, 3550, 3736,
 5334, 7208–9
 Allium, 1818
 Cicer. Chickpea, 3424
 Crop plants, 3639
 Fagus. Beech, 5073
 Glycine. Soya bean, 1646
 Gossypium. Cotton, 2761, 4635, 4648
 Hordeum. Barley, 5534
 Larix. Larch, 5111
 Lycopersicon. Tomato, 1570, 3649, 5203–4, 5216, 5444,
 7106
 Malus. Apple, 6773, 6795
 Medicago, 3756
 Nicotiana. Tobacco, 105, 6679, 6705
 Oryza. Rice, 2510, 4294
 Prunus. Apricot, 3016
 Pyrus. Pear, 4906
 Rhizobium, 5567
 Saccharomyces, 1722, 7219–20
 Solanum. Potato, 2686
 Triticum. Wheat, 1832, 3648, 3826, 5443
 Zea. Maize, 98, 537–8, 2349–50, 2394, 3486, 3495,
 4153, 5564, 6154
 See also chromosome aberrations
 Mutation, back, 3572, 3584
 Helianthus. Sunflower, 2083
 Schizosaccharomyces, 1733
 Zea. Maize, 540
 Mutation, induced, 106, 108, 128–9, 133–6, 138–40, 142–7,
 225, 1786–7, 1789, 1801, 1803, 2080, 3474, 3578–80,
 3582–3, 3604, 3663, 3686, 5328, 5354, 5405, 5460,
 7205, 7210, 7212
 Acer, 2078
 Agropyron, 2048
 Arachis. Groundnut, 1859
 Aspergillus, 1709, 5330
 Avena. Oats, 466, 2130, 2274
 Beta. Sugar beet, 85, 1076
 Brassica. Cabbage, 1832
 Brassica. Mustard for oil, 2914, 3623, 5463
 Brassica. Rape, 1753
 Candida, 1711

Mutation, induced—*continued*

- Cereals, 2051, 2086, 3867
Chlorella, 1698, 7205
Citrus, 3060
Corchorus. Jute, 1044, 4682
Coriandrum, 7201
 Crop plants, 137, 237–9, 247, 2039–40, 2088, 3468, 3521,
 3523, 3813–4, 5596–7, 5634
Crotalaria, for fibre, 1047
Cucumis. Melon, 2075, 3477
Fagopyrum. Buckwheat, 2062
 Forest trees, 2078
 Fruit crops, 4844
Glycine. Soya bean, 1647, 2055, 2060
Gossypium. Cotton, 997–8, 2063–8, 2759–60, 6560–1
Hordeum. Barley, 32, 92–3, 99, 115, 130, 141, 612–20,
 629–30, 1855, 2004, 2081–2, 2125, 2130, 2408–9, 2424,
 3812, 3890, 3900, 4214–25, 4238, 5538, 6251–3
Hypomyces, 7068
Lens. Lentil, 5319
Linum. Flax, 4672
Lolium, 3492
Lycopersicon. Tomato, 91, 104, 107, 110, 1571–4, 1753,
 2041, 2069–71, 3328, 3336–7, 3812, 5206, 5208, 5551
Malus. Apple, 87, 1963, 2076, 3754
Medicago, 5550
Melilotus. Sweet clover, 870
Micrococcus, 1701–3
Mycobacterium, 1703
Nicotiana. Tobacco, 3506, 6680
Oryza. Rice, 714, 1856–7, 2495, 2508–9, 2511, 2540,
 2548, 3900, 4303, 6332–3, 6365
Paspalum, 792
Pennisetum, for grain, 657
Phaseolus, 94, 200, 2055
Pinus. Pine, 5096
Piricularia, 4336–7
Pisum. Pea, 97, 1678–83, 1685, 1688, 1802, 2056–9,
 2061, 2069, 3469, 3475–6, 3478, 5305, 5311, 7178–82,
 7184–7
Poa, 195
Prunus. Cherry, 2077, 3034
Ribes. Black currant, 2947, 4985
Ricinus. Castor oil plant, 4796, 6738–9
Saccharomyces, 89, 1718–21, 1730, 3436, 3443–5, 3453,
 5333–7, 7221–3, 7226, 7228–9
Saccharum. Sugar cane, 4705
Schizosaccharomyces, 1733–4, 3454, 3566–7, 5347, 5349
Secale. Rye, 1754
Sesamum. Sesame, 1858
Solanum. Potato, 200, 903, 2041, 2072–4, 2669
Sorghum, for grain, 679–81
Streptococcus, 5328
Streptomyces, 1704, 1706, 7211
Torulopsis, 1735
Trifolium. Subterranean clover, 861
Triticum. Wheat, 86, 100–2, 109, 341, 350–5, 378, 1753,
 2041–9, 2052, 2125, 2184–93, 2223, 3475, 3666,
 3739–40, 3742, 3890, 3945–6, 3960, 5471, 5995–9
Vicia. Broad bean, 33, 141, 1605, 1804, 2061, 3581,
 5404
Vicia. Vetch, 2061
Vitis, 1239, 5743–4
Zea. Maize, 15, 31, 539, 1976, 2053–4, 3470, 3496,
 3498, 3675, 3737–8, 4154–7, 5674, 6156–61, 6173, 6175
Zea. Sweet corn, 95
 Mutation, somatic, 3557
Citrus. Lemon, 2079, 6855
Citrus. Orange, 6855
Diospyros. Persimmon, 2079
Malus. Apple, 1236, 1250, 4886
Mentha, 1697
Populus. Poplar, 1452
Pyrus. Pear, 1263, 3670, 5475
Raphanus. Radish, 1504

Mutation, somatic—continued

- Ricinus*. Castor oil plant, 30
- Saccharomyces*, 1722, 3446-7
- Solanum*. Potato, 904
- Vitis*, 5013-4, 6925
- Mutation, spontaneous, 1800, 5387
- Asparagus*, 7034
- Avena*. Oats, 4053
- Bromus*, 4424
- Citrus*. Lemon, 3477
- Corchorus*. Jute, 4681
- Cucumis*. Melon, 7070
- Diospyros*. Persimmon, 3477
- Gossypium*. Cotton, 1925, 2757, 6558-9
- Helianthus*. Sunflower, 1209, 2929
- Hordeum*. Barley, 2422, 6243, 6250
- Larix*. Larch, 5110
- Lupinus*. Lupin, 3488
- Lycopersicon*. Tomato, 5207
- Oryza*. Rice, 2478, 2510
- Paspalum*, 2584
- Prunus*. Cherry, 5433
- Puccinia*, 6079
- Saccharomyces*, 1707
- Schizosaccharomyces*, 1734
- Sorghum*, for grain, 2592
- Triticum*. Wheat, 2241
- Zea*. Maize, 2351-3, 3505, 6155, 6194
- Mycobacterium*, 1703
- Mutation, induced, 1703
- Novoembichine, 1703
- X rays, 1703
- Mycosphaerella*
- Arachis*. Groundnut, 1960, 3751, 4785, 4969
- Cucumis*. Melon, 3308
- Cydonia*. Quince, 6830
- Fragaria*. Strawberry, 3134, 5791
- Linum*. Linseed, 3849, 4802
- Musa*. Banana, 5008, 6911-2
- Pisum*. Pea, 5926
- Myristica*. Nutmeg
- Nucleus, 200
- Sex chromosomes, 4784
- Myzus*
- Physiological races, 1612
- Vicia*. Broad bean, 1612

NAPHTHALENEACETIC ACID

- Allium*, 5134
- α -Naphthylacetamide
- Lathyrus*, 2943
- Nectar
- Prunus*. Cherry, 4926
- Prunus*. Peach, 1284

Needle grass, *see Stipa*

Nematodes

- Carthamus*. Safflower, 2934
- Coffea*. Coffee, 1166
- Medicago*, 6440
- Nicotiana*. Tobacco, 213, 2002
- Saccharum*. Sugar cane, 1058
- Solanum*. Potato, 2713

Neutrons

- 1809
- Avena*. Oats, 466, 2274
- Beta*. Sugar beet, 1076
- Brassica*. Cabbage, 1832
- Brassica*. Rape, 1753
- Cereals, 2051
- Crop plants, 5592
- Glycine*. Soya bean, 1652, 7163
- Gossypium*. Cotton, 2065-6, 2759, 6561
- Hordeum*. Barley, 614, 1817, 1821, 6253
- Lycopersicon*. Tomato, 1753
- Oryza*. Rice, 1857, 2495, 2500
- Paspalum*, 792

Neutrons—continued

- Pennisetum*, for grain, 4258
- Phaseolus*, 3382
- Pisum*. Pea, 2069
- Ribes*. Black currant, 4985
- Ricinus*. Castor oil plant, 6739
- Stone fruits, 1976
- Triticum*. Wheat, 353, 1753, 1832, 2164, 2186, 3945
- Vicia*. Broad bean, 1817
- Zea*. Maize, 2356, 4155-6, 6173
- New Zealand hemp, *see Phormium*
- Nicotiana*. Tobacco
- Alkaloids, 1127, 1129, 6671, 6683, 6687
- Alternaria*, 6649, 6689
- Aminoacids, 6699
- Amphidiploidy, 2867, 4750, 6678
- Aneuploidy, 2878
- Asynapsis, 6686
- Bacteria, 2002
- Breeding, 221, 1125, 2866, 2883, 6653, 6667, 6669-70, 6690-3, 6695
- Cercospora*, 6652
- Chlorogenic acid, 6660
- Chlorophyll, 6653, 6705
- Chromosome aberrations, 2087, 4752
- Chromosome morphology, 3729
- Climate, 1156
- Colour, 1128, 2870
- Combining ability, 1132, 4747
- Cytoplasmic inheritance, 20, 2873, 6650, 6655
- Development, 3731, 6677
- Development, abnormal, 1128, 3675
- Dominance, 4745
- Endosperm, 1165
- Enzymes, 1133, 5628, 5805
- Epistasis, 4745
- Erysiphe*, 2884-5, 4750, 6646, 6700
- Flower, 6672
- γ rays, 3506, 6680
- Genetics, 1128-9, 1150, 2870-1, 3683, 3753, 4750, 5811, 5813, 5868, 6657, 6662, 6664, 6666, 6668, 6671-3, 6679, 6694, 6700
- Geographical races, 1846
- Germination, 4753, 6668
- Growth period, 1141
- Heterosis, 1131, 3811, 6645, 6676
- Heterozygosis, 3679
- History and evolution, 6703
- Hybrid varieties, 4746
- Hybridization, 1147, 1794, 2007, 2872, 6659
- Hybridization, graft, 3585
- Hybridization, interspecific, 20, 1135-6, 2037, 2867, 2878, 3493, 3497, 3519, 3675, 3728, 4748-9, 4754, 5581, 5802-3, 5806, 5808, 5899, 6654-5, 6657, 6663, 6668, 6677, 6696, 6698, 6700
- Inbreeding, 1793
- Inheritance of acquired characters, 6681
- Irrigation, 1146
- Leaf, 3730, 6679
- Light, effect of, 6668
- Linkage, 6675
- Meloidogyne*, 4757, 5935
- Molecular genetics, 1788
- Multiple alleles, 6674
- Multiple genes, 1130
- Mutation, 105, 6679, 6705
- Mutation, induced, 3506, 6680
- Nematodes, 213, 2002
- Nicotine, 1130, 6667-8
- Nitrogen, 6645
- Nornicotine, 2881
- Nucleus, 6678
- Nutrients, 1135, 6681
- Nucleic acids, 1788, 6678
- Orobanche*, 1153, 5807, 5810

- Nicotiana*. Tobacco—continued
 Ovule, 1142
 Pathology, 3519, 5802, 6647, 6654, 6661, 6673, 6688, 6690
Pellicularia, 6702
Peronospora, 1147–9, 2882, 5560, 5576, 5581, 5628, 5803–4, 5806, 5813–4, 5868, 5899, 6659–60, 6662–6, 6668, 6671, 6691–9
 Peroxidase, 6674
 Plant collections, 4755
 Pollen, 1788
 Pollination, 1142, 4746, 4749
 Polyploidy, 2037, 2866, 2879, 3519, 4753–4, 6685
 Population genetics, 1138
Pratylenchus, 4757
 Protein, 1134
Protoparce, 2007
Pseudomonas, 6648, 6651
 Quality, for smoking, 1143–4, 1963, 2867, 3519, 3751, 6671, 6698
 Quantitative characters, 1127, 1132, 1846, 2871–2
 Seed, 1137
 Seed production, 1145, 4746
 Selection artificial, 2874, 3589, 5815, 6682
 Size, 6672
 Statistics, biometry, 1127, 1793–4
 Statistics, genetics, 1793–4, 3589
 Sterility, fertility, 3519, 6674, 6686
 Sterility, male, 20, 2873, 2880, 5806, 6650, 6655
 Temperature, effect of, 2037, 4756
Thielaviopsis, 2002, 2886, 3791, 5810–2
Thrips, 5808
 Tissue culture, 2879, 4752, 6685
 Tumours, 1134–5
 Variation, 1137, 1793–4, 2874, 3731, 4757
 Variegation, 1136
 Varieties, 1139–40, 1963, 2002, 2004, 2011, 2095, 2875–7, 3789, 4751, 6656, 6658, 6684, 6688
 Variety trials, 1126, 1146, 2868–9
Verticillium, 2887
 Viruses, 1154–5, 2888, 3683, 3753, 5805, 5815–6, 6666, 6668, 6695, 6703
 Water, effect of, 2087
 X rays, 3730
 Yield, 4756
- Nicotine
Nicotiana. Tobacco, 1130, 6667–8
Nigrospora, see *Khushkia*
 Nitrate reductase
Triticum. Wheat, 383
Zea. Maize, 500
- Nitrogen, 116
Cannabis. Hemp, 2800–1
Corchorus. Jute, 6590
Dactylis, 2565
Gossypium. Cotton, 6583
Hordeum. Barley, 265
Ipomoea. Sweet potato, 3703
Lolium, 2565, 2576
Malus. Apple, 1253
Nicotiana. Tobacco, 6645
Oryza. Rice, 735, 2536, 2543, 4319–20, 6357
 Plectascales, 1709
Saccharum. Sugar cane, 2814
Trifolium. Subterranean clover, 863
Triticum. Wheat, 1897, 2246, 2251, 3886, 3990
Zea. Maize, 4177
- Nitrosamines, 146
Hordeum. Barley, 620
 N-Nitrosoethylurea, 147, 3583
Hordeum. Barley, 2409
Pisum. Pea, 3475
Triticum. Wheat, 3475
 Nitrosoethylurethane
Vicia. Broad bean, 111
- 1-Nitroso-imidazolidone-2,
Saccharomyces, 3453
 1-Nitroso-3-nitro-1-methyl guanidine
Saccharomyces, 5336
 Nitrous acid, 106, 5347, 7223
Nocardia, 3432
 Enzymes, 3432
 Nondisjunction
Zea. Maize, 2367
 Nornicotine
Nicotiana. Tobacco, 2881
 Novoembichine
Mycobacterium, 1703
 Nucleolus
Brassica. Cabbage, 1524
Secale. Rye, 348
Triticum. Wheat, 348, 1851
Vicia. Broad bean, 1851
 Nucleus, 3595
Brassica. Cabbage, 1524
 Crop plants, 3685
Myristica. Nutmeg, 200
Nicotiana. Tobacco, 6678
 Nutmeg, see *Myristica*
 Nutrients
Avena. Oats, 2140
 Crop plants, 5607
Cryptomeria, 5089
Glycine. Soya bean, 1659, 3400
Gossypium. Cotton, 2786, 4647, 4652, 4655
Hordeum. Barley, 4243
Lycopersicon. Tomato, 1589, 3330, 5192
Malus. Apple, 5916
Nicotiana. Tobacco, 1135, 6681
Oryza. Rice, 736, 2542, 4329–30
Pinus. Pine, 1472
Secale. Rye, 6108
Thea. Tea, 4762
Triticum. Wheat, 385, 414–5, 2140, 2155, 2245, 3987, 6052
Vitis, 6941
Zea. Maize, 579–80, 4105, 4125, 4140
 Nutritive value, see quality
 Nuclear volume, 3595
 Nucleic acids, 1787, 3494, 3595, 3604, 3613
Allium. Onion, 3591
Brassica. Cabbage, 1524
 Crop plants, 253
Gossypium. Cotton, 1013, 4661
Helianthus. Jerusalem artichoke, 7030
Hordeum. Barley, 1788, 4231
Lolium, 6383
Nicotiana. Tobacco, 1788, 6678
Phaseolus, 1621
Pyrus. Pear, 6824
Saccharomyces, 1722
Secale. Rye, 6110
Solanum. Potato, 6497
Triticum. Wheat, 2217, 5615
Vicia. Broad bean, 1607, 3491
Zea. Maize, 548, 2342, 3679, 5516
 Nucleolar body
Lotus. Birdsfoot trefoil, 4535
 Nucleosides, 3612
- OAK, see *Quercus*
 Oat grass, see *Arrhenatherum*
 Oats, see *Avena*
Oenanthe
 Variation, 1533
Oidium
Cucumis. Cucumber, 5723
 Oil palm, see *Elaeis*
 Okra, see *Hibiscus*

- Olea*. Olive
 Breeding, 4973
 Plant collections, 4975
 Pollen, 3093
Spilocaea, 4976
 Varieties, 4974
 Variety trials, 1331
 Oligogenes, *see* genetics
 Olive, *see* *Olea*
 Onion, *see* *Allium*
Onobrychis. Sainfoin
 Boron, 6413
 Chromosome morphology, 4529
Corynebacterium, 5887
 Ecotypes, 868
 Heterosis, 813
 Hybridization, graft, 1892
 Land races, 4528
 Leaf, 1980
 Pollen, 6413
 Polyploidy, 4529
 Seedlings, 1980
 Taxonomy, 4529, 6464
 Variation, 867
 Yield, 1980, 2653
Ophiobolus
Triticum. Wheat, 432, 2258
 Orange, *see* *Citrus*
 Orchard grass, *see* *Dactylis*
 Origin of life, 3542
Orobanch
Helianthus. Sunflower, 1218, 5500, 5736-7
Nicotiana. Tobacco, 1153, 5807, 5810
Oryza. Rice
Acrocyndrium, 739
Aphelenchoides, 5790
 Asynapsis, 4300
 β rays, 2532
 Back crossing, 2507
 Bacteria, 737
 Biochemistry, 4344
 Breeding, 696-7, 701, 703-7, 2479-83, 2489-98, 2526, 2540, 4285, 4289, 4334, 5929, 6323, 6327, 6351, 6369
 Caryopsis, 4325
 Chemicals, effect of, 3900
Chilo, 2115, 4291, 4345
 Chromosome aberrations, 2528, 4291
 Chromosome morphology, 4315
 Climate, 1848
Cochliobolus, 738, 4291
 Cold resistance, 4331
 Colour, 1953
 Competition, 4291, 6361
Corticium, 2545
 Cytoplasmic inheritance, 4321
 Density of stand, 713, 6358-60
 Development, 16, 2530, 2532, 3724, 3727
 Embryo, 3716, 4324-5
 Endosperm, 6353
 Fatty oil, 4293
 Flower, 4322-3
 γ rays, 1856, 2509, 4303
 Genetics, 710, 731, 745, 1953, 2477, 2501, 2533, 3726-7, 4291-8, 4331, 4335, 4338-40, 4342, 5522, 6328-9, 6332, 6353, 6367
 Genome analysis, 1853, 2527, 4301
 Geographical races, 6349
 Germination, 6345
 Gibberellins, 4322-3
 Grafting, 3716
 Growth period, 710, 714, 1849, 2501-2, 2545, 3720, 3798, 4320, 6346-7
 Habit, 3718-9, 4320
 Hairs, 6368
 Heat, drought resistance, 206, 725, 2541
Oryza. Rice—continued
 Height, 710, 2498, 3718, 4291, 4297-8
Helminthosporium, 4291
 Heterosis, 1849, 2503, 6331
 History and evolution, 712, 726, 4294, 4304, 6165, 6342-3
 Hormones, 4323
 Hybrid varieties, 711
 Hybridization, 2503-6, 2529, 3715, 3721, 4288, 4291, 4299, 4314, 6328, 6330
 Hybridization interspecific, 712, 1849, 1894, 1903, 1953, 2477-8, 2502, 2507, 3722-3, 4300-2, 4316, 6331
Hydrellia, 4291
 Inflorescence, 3725-6
 Insects, 2115
 Irrigation, 4328
 Land races, 4314
Leptosphaeria, 1899
 Linkage, 2477-8
 Lodging, 736, 1849, 1894, 2542-3, 4291
 Maleic hydrazide, 16
 Meiosis, 1853, 6344
 Mixtures of crops or genotypes, 1847
 Modifiers, 3720
 Morphology, 6350, 6356, 6359-60
 Multiple genes, 3725
 Mutation, 2510, 4294
 Mutation, induced, 714, 1856-7, 2495, 2508-9, 2511, 2540, 2548, 3900, 4303, 6332-3, 6365
 Mutation spontaneous, 2510, 2478
 Neutrons, 1857, 2495, 2500
 Nitrogen, 735, 2536, 2543, 4319-20, 6357
 Nutrients, 736, 2542, 4329-30
Pachydictylosis, 2114, 6368
 Pathology, 2540
Pellicularia, 744
 Photoperiodism, 3714, 4291, 4346, 6329
 Photosynthesis, 4319, 6358
Piricularia, 740-3, 1849, 2546-9, 3703, 3748, 4291, 4332-44, 5500, 5527, 5665, 5929, 6363-7
 Plant collections, 228, 2497, 4313
 Pollination, 730, 6330
 Polyploidy, 727-8, 2477, 2511, 2529, 4316-7
 Protein, 4293
 Quality, for cooking, 4291, 6354
 Quality, for milling and baking, 2526, 6355
 Quality, of edible product, 732, 2535, 6351
 Quantitative characters, 2506, 4296, 4325
 Radiation, 714, 729, 6333
 Radioactive isotopes, 2532, 6332
 Red rot, 2544
 Selection, artificial, 4305, 6334
 Selection, natural, 715, 4304
 Shedding, 4312
 Silicon, 2534, 4291
 Starch, 4293
 Statistics, biometry, 6350, 6359-60
 Sterility, female, 2533
 Sterility, fertility, 21, 731, 2478, 2503, 2505, 3722, 4314, 4317, 4323, 6328, 6331, 6333, 6349
 Sterility, male, 4321
 Taxonomy, 733, 4291, 4294, 4314, 4325-7, 6352, 6356
 Temperature, effect of, 709, 744, 3720, 6345, 6347
 Toxic soils, 2537-9
 Variation, 713, 2507, 3717, 3719
 Varieties, 206, 716-25, 1893, 2093, 2496, 2499, 2512-26, 3798, 3820, 4306-13, 6335-41
 Variety trials, 228, 698-700, 702, 708-9, 2027, 2476, 2484-91, 3797, 4286-7, 4290, 4330, 6324-6
 Viruses, 745, 1848, 2550-1, 4291, 6369
 Water balance, 2541, 4318
 Waterlogging, 1935, 2539
 X rays, 2495, 2500, 2528, 3724, 3900, 6332
Xanthomonas, 4291
 Yield, 713, 734, 2478, 2531, 4295

Oryzopsis

- History and evolution, 4447
- Hybridization, interspecific, 4447

Oscinella

- Hordeum*. Barley, 653, 5664
- Triticum*. Wheat, 5662
- Zea*. Maize, 5684, 6218

Osmosis

- Beta*. Sugar beet, 5799

Ostrinia

- Zea*. Maize, 494, 2388–9, 4193, 5538, 5687, 6219

Oulema

- Triticum*. Wheat, 456

Ovary, *see* flower

Overdominance, *see* heterosis

Ovule

- Gossypium*. Cotton, 2773
- Nicotiana*. Tobacco, 1142

Oxycoccus. Cranberry

- Fungicides, 6908
- Pollen, 6908
- Quality, of edible product, 6909
- Sterility, fertility, 6908

Oxygen, 135

- Hordeum*. Barley, 630
- Triticum*. Wheat, 121, 3739

Ozone

- Allium*. Onion, 7031

PACHYDIPLOSY

- Oryza*. Rice, 2114, 6368

Paddy, *see* *Oryza*

Palms

- Chromosome number, 1315

Panicum

- Aneuploidy, 6407
- Ecotypes, 4445
- Genetics, 806, 6408
- Geography, 807
- History and evolution, 807
- Meiosis, 6285
- Polyploidy, 4409, 4445, 6285
- Ustilago*, 5680
- Variety trials, 4391

Panicum, for grain

- Heat, drought resistance, 2444
- Quality, nutritive value, 1835
- Varieties, 2443, 6284

Papaver. Poppy

- Alkaloids, 1177, 4781–2, 6721
- Colour, 6721
- Helminthosporium*, 6722
- Heterosis, 1176, 6722
- Morphine, 1178
- Protein, 1178
- Quantitative characters, 6723

Papaw, *see* *Carica*

Papaya, *see* *Carica*

Paprika, *see* *Capsicum*

Parsnip, *see* *Pastinaca*

Parthenocarpy

- Citrus*, 3059
- Citrus*. Orange, 4941
- Cucumis*. Cucumber, 2007, 5178, 7089
- Diospyros*. Persimmon, 2079
- Ficus*. Fig, 6859
- Lycopersicon*. Tomato, 3684
- Pyrus*. Pear, 6827
- Vitis*, 6923, 6931

Parthenogenesis, *see* apomixis

Paspalidium

- Hybridization, interspecific, 2596

Paspalum

- Apomixis, 793, 2584, 3760
- γ rays, 792

Paspalum—continued

- Hybridization, interspecific, 3760
- Mutation, induced, 792
- Mutation, spontaneous, 2584
- Neutrons, 792
- Sterility, fertility, 792
- Varieties, 6400
- Variety trials, 2554, 4436

Passiflora

- Plant collections, 1332
- Variety trials, 1332

Passion fruit, *see* *Passiflora*

Pastinaca. Parsnip

- Development, abnormal, 1882

Paternal inheritance, *see* patrocliny

Pathology

- Beta*. Sugar beet, 5792, 5795
 - Cereals, 3876, 5608
 - Cocos*. Coconut, 5364
 - Crop plants, 256, 1424, 3834, 3844, 5609, 5619–21, 5626, 5633–4, 5842–3, 5846–7, 5875–7, 5889, 5925, 5927
 - Cucumis*. Cucumber, 7090
 - Cucurbits, 5162
 - Forest trees, 1421, 1438
 - Fragaria*. Strawberry, 3130, 5918
 - Fruit crops, 5756, 5766, 5779
 - Helianthus*. Sunflower, 5738
 - Hevea*. Rubber, 4834–5
 - Hordeum*. Barley, 3699, 5651, 6228
 - Humulus*. Hop, 1182
 - Ipomoea*. Sweet potato, 951
 - Lycopersicon*. Tomato, 1585, 7117
 - Malus*. Apple, 5767
 - Medicago*, 2629
 - Nicotiana*. Tobacco, 3519, 5802, 6647, 6654, 6660, 6673, 6688, 6690
 - Oryza*. Rice, 2540
 - Pyrus*. Pear, 3010
 - Rubus*. Raspberry, 1335
 - Saccharum*. Sugar cane, 4695, 6613
 - Solanum*. Potato, 2015, 2106, 2668–9, 2684, 2711–3700, 4551, 4583, 5689, 5693, 5709, 5898, 6494, 6511
 - Sorghum*, 4282
 - Trifolium*. Red clover, 1970
 - Triticum*. Wheat, 5635, 5651, 5848
 - Vitis*, 5745, 5748, 5921
 - Zea*. Maize, 6122
- ## Patrocliny, 6845
- Pea, *see* *Pisum*
 - Pea, southern, *see* *Vigna*
 - Peach, *see* *Prunus*
 - Peanut, *see* *Arachis*
 - Pear, *see* *Pyrus*
- ## Peat
- Vicia*. Broad bean, 1804
- ## Pecan, *see* *Carya*
- ## Pectin
- Lycopersicon*. Tomato, 7098
- ## *Pectinophora*
- Gossypium*. Cotton, 5522
- ## *Pegomyia*
- Beta*, 5725
 - Beta*. Sugar beet, 5725
- ## *Pellicularia*
- Cichorium*. Chicory, 3701
 - Crop plants, 5932
 - Eleusine*, 662
 - Fibre plants, 953
 - Genetics, 1036
 - Gossypium*. Cotton, 4655
 - Heterocarpyosis, 1036
 - Nicotiana*. Tobacco, 6702
 - Oryza*. Rice, 744
 - Phaseolus*. Lima bean, 5280

Pellicularia—continued

Physiological races, 2850, 5932, 6702

Saccharum. Sugar cane, 2850

Solanum. Potato, 2713

Penicillium

Citrus, 6854

Enzymes, 6854

Physiological races, 6854

Pennisetum

Apomixis, 2599, 3761, 6409

Chromosome aberrations, 657

Epistasis, 2599

Genetics, 3761, 6301

Hybridization, interspecific, 1839, 1917, 1936, 2440, 2597

Meiosis, 2449, 6297

Protein, 4446, 6300

Reproduction, 6301

Sterility, male, 2597

Varieties, 6409

Variety trials, 4446

Pennisetum, for grain

Aneuploidy, 658, 4258, 4393

Apomixis, 659

Breeding, 1900, 2119, 2134, 2441, 2445, 2450, 4392

Chlorophyll, 3490

Cold resistance, 4259

Colour, 6290

Epistasis, 659

Ethyl methanesulphonate, 4258

Genetics, 4257, 4374, 6289–90, 6300

Hybrid varieties, 2447, 2450

Hybridization, 6302

Inbreeding, 3490, 6291

Inflorescence, 6290, 6299

Meiosis, 1936, 6297

Mutation, induced, 657

Neutrons, 4258

Photoperiodism, 660, 4374

Plant collections, 2442, 6293

Polyploidy, 6298

Protein, 6300

Quality, nutritive value, 1835

Quantitative characters, 4257

Sclerospora, 3747

Sterility, male, 1836, 2450, 4393, 6302

Toxic soils, 4259

Variation, 6292–4

Varieties, 1904, 2121, 2133, 2598, 6295

Variety trials, 2119, 2441, 2446

Yield, 6294

Pepper, *see Capsicum*

Peppermint, *see Mentha*

Perennial habit

Secale. Rye, 3684, 4081

Perianth, *see flower*

Period growth, *see growth period*

Peronospora

Beta. Sugar beet, 4738, 5486, 5793

Brassica, 5143

Cucumis. Cucumber, 5724

Glycine. Soya bean, 1668

Helianthus. Sunflower, 6756

Medicago, 4505

Nicotiana. Tobacco, 1147–9, 2882, 5560, 5576, 5581,

5628, 5803–4, 5806, 5813–4, 5868, 5899, 6659–60,

6662–6, 6668, 6671, 6691–9

Physiological races, 1148–9, 5143, 5560, 6668

Pisum. Pea, 3421

Peroxidase

Beta. Sugar beet, 6635

Lolium, 6388

Malus. Apple, 2993

Nicotiana. Tobacco, 6674

Perry, *see quality*

Persea. Avocado

Cell division, 6884

Growth period, 3098

History and evolution, 1448

Phytophthora, 6883

Pollination, 6879–82, 6886

Selection, artificial, 1448

Varieties, 6878, 6885

Yield, 6886

Persimmon, *see Diospyros*

Persistence, *see longevity*

Pesticides, 1823

Petal, *see flower*

Petasites

Hybridization, interspecific, 1534

Taxonomy, 1534, 3288

Phages, *see bacteriophages*

Phakopsora

Gossypium. Cotton, 4654

Physiological races, 4654

Phalaris

Breeding, 2585, 5553–4

Climate, 5570

Genetics, 5557, 5571

Geographical races, 797, 5557

Germination, 797

Hybrid varieties, 796

Hybridization, interspecific, 795–6, 5555–6, 5572

Plant collections, 2586

Quality, nutritive value, 5568

Selection, artificial, 4354

Temperature, effect of, 797

Variation, 4437, 5568

Varieties, 5569

Variety trials, 794, 5552

Vernalization, 5557, 5571

Phaseolus

Amphidiploidy, 5258, 7143

Anthocyanin, 1622

Back crossing, 3510

Bacteria, 3386, 5732

Breeding, 1631, 3370, 5239, 7138

Calcium, 5269

Cell division, 7145

Cercospora, 3371

Chromosome aberrations, 3375

Chromosome morphology, 5259, 5265

Cold resistance, 4866

Colletotrichum, 200, 1629, 3385, 5275–6, 5580, 7152

Colour, 3384, 3686, 5257

Density of stand, 3384

Dinoseb-acetate, 5278

Fungi, 5272

Genetics, 1618, 2000, 3372–3, 3386, 3626, 5257, 5466,

5593, 7140–1

Genome analysis, 7143

Germination, 1621

Habit, 3372, 7148

Heat, drought resistance, 229

Hybridization, 1619, 3382

Hybridization, interspecific, 126, 1624, 1843, 2004,

3374–5, 3510, 3626, 5258–9, 5466, 5593, 7142–4

Irrigation, 3383, 7149–50

Isariopsis, 5277

Leaf, 5522

Legislation, 5264

Meiosis, 3374, 7142

Mutation, induced, 94, 200, 2055

Neutrons, 3382

Nucleic acids, 1621

Photoperiodism, 7140

Pollen, 1623

Polyploidy, 1621

Protein, 127, 3626, 5466, 7148

Pseudomonas, 1627, 5270–1, 5276, 5926

Phaseolus—continued

- Quality, for canning, 5266-7
- Quality, for cooking, 200, 5269, 7147
- Quality, for freezing, 7146
- Quality, nutritive value, 3378, 5269
- Quality, of edible product, 1600
- Quantitative characters, 7141
- Radiation, 2055
- Reproduction, 7140
- Seed, 1622
- Selection, artificial, 1625
- Serology, 127, 1624, 3626, 5466, 7144
- Sterility, fertility, 3375, 7143
- Taxonomy, 127, 1624, 7144
- Temperature, effect of, 200, 7145-6
- Uromyces*, 1617, 1954, 2004, 5267, 5273-4, 5276, 7151
- Variation, 3373
- Varieties, 240, 1620, 2055, 2091-2, 3376-7, 3379-81, 5241, 5260, 5262-4, 5277, 5599
- Variety trials, 1600, 1614-6, 3361, 3368-9, 3371, 3383, 3409, 5254-6, 5268, 7136, 7139, 7149-50
- Viruses, 1631, 3387, 5926
- Xanthomonas*, 5500
- Yield, 1625, 3382, 3384, 5268
- Zinc, 1626

Phaseolus. Lima bean

- Acanthoscelides*, 7147
- Epilachna*, 1630
- Genetics, 5280
- Heterozygosis, 1632
- Pellicularia*, 5280
- Population genetics, 1632, 1798, 5279
- Selection, natural, 1798
- Variation, 7153
- Varieties, 7147, 7154
- Variety trials, 5240

Phenethyl alcohol

- Allium*. Onion, 3264

Phenols

- Castanea*. Chestnut, 4956
- Corchorus*. Jute, 4680
- Eucalyptus*, 3223, 5084-6, 6984
- Pinus*. Pine, 5100
- Pisum*. Pea, 3598
- Secale*. Rye, 483, 485
- Solanum*. Potato, 936
- Zea*. Maize, 532

Phenoxyacetic acids

- Hordeum*. Barley, 2116
- Linum*. Linseed, 2116
- Pisum*. Pea, 2116

Phenyl mercury acetate

- Malus*. Apple, 6809

Phleomycin

- Vicia*. Broad bean, 3581

Phleum

- Breeding, 195
- Growth period, 6372
- Mixtures of crops or genotypes, 195
- Plant collections, 2568
- Puccinia*, 2568
- Sterility, male, 1964, 4423
- Varieties, 2095-6, 6372
- Variety trials, 748, 4390, 4422, 6377
- Viruses, 1878
- Yield, 1877

Phloemisus

- Populus*. Poplar, 5072

Phoma

- Beta*. Sugar beet, 5799
- Medicago*, 3756

Phorbia

- Triticum*. Wheat, 5661

Phormium

- Reproduction, 2813
- Variety trials, 2813

Phosphatase

- Zea*. Maize, 4119

Phosphorus

- Cereals, 2139
- Cucumis*. Melon, 5161
- Gossypium*. Cotton, 6581
- Malus*. Apple, 1253
- Saccharomyces*, 1731
- Solanum*. Potato, 4588
- Vitis*, 6941
- Zea*. Maize, 6126

Photoperiodism, 1774

- Cannabis*. Hemp, 2801
- Cereals, 2135
- Crop plants, 1863
- Dactylis*, 766, 1863
- Dichanthium*, 4439
- Festuca*, 1863
- Fragaria*. Strawberry, 4847
- Glycine*. Soya bean, 1674, 5299
- Gossypium*. Cotton, 2066, 4666-7
- Helianthus*. Sunflower, 6757
- Hibiscus*, 2809, 2811
- Hordeum*. Barley, 2028, 2423, 4219, 4255, 5536
- Indigofera*, 4541
- Lolium*, 1863
- Oryza*. Rice, 3714, 4291, 4346, 6329
- Pennisetum*, for grain, 660, 4374
- Phaseolus*, 7140
- Pisum*. Pea, 7194
- Pulses, 5242
- Sorghum*, for grain, 4284
- Spinacia*. Spinach, 7055
- Triticum*. Wheat, 392-3, 2165, 3967, 6002, 6083
- Zea*. Maize, 4171

Photosynthesis, 2080

- Dactylis*, 1873
- Forest trees, 5060
- Grasses, 4373
- Hordeum*. Barley, 2422, 4235
- Lolium*. 1873
- Lupinus*. Lupin, 4533
- Lycopersicon*. Tomato, 5218
- Oryza*. Rice, 4319, 6358
- Pisum*. Pea, 1681
- Prunus*. Peach, 4932
- Raphanus*. Radish, 5125
- Triticum*. Wheat, 112, 3976, 3997, 6030
- Zea*. Maize, 4120, 4153, 4167

Phylogeny, *see* evolution, general theory, *and* history *and* evolution

Phyllotreta

- Brassica*, 1530
- Brassica*. Cauliflower, 1530
- Brassica*. Kale, 1530
- Brassica*. Sprouting broccoli, 1530
- Brassica*. Swede, 1530
- Brassica*. Turnip, 1530
- Raphanus*. Radish, 1530

Phylloxera

- Vitis*, 1392, 3201, 5034, 5740, 5743, 5748-52, 5754-6947

Physalospora

- Saccharum*. Sugar cane, 1910, 2849

Physiological races

- Acyrtosiphon*, 1612
- Aliernaria*, 4939, 5933
- Aphanomyces*, 1691, 5313
- Bremia*, 5926
- Cephalosporium*, 592-3
- Cercospora*, 6641-2
- Cercospora*, 322

Physiological races—*continued*

- Colletotrichum*, 1628, 2849, 5275, 5580
- Corynebacterium*, 5867
- Ditylenchus*, 857
- Erysiphe*, 1865, 4069, 4516, 5960, 6274-5
- Fungi, 5841
- Fusarium*, 7121-2
- Gibberella*, 2145
- Hemileia*, 2892, 4765
- Heterodera*, 200, 4041, 4596, 4598-600, 5297-8, 5486, 5934, 6527
- Hypomyces*, 5173
- Insects, 1425
- Macrosiphum*, 1612
- Melampsora*, 4675, 4803
- Myzus*, 1612
- Pellicularia*, 953, 2850, 5932, 6702
- Penicillium*, 6854
- Peronospora*, 1148-9, 5143, 5560, 6668
- Phakopsora*, 4654
- Physalospora*, 2849
- Phytophthora*, 200, 257, 820, 935-6, 1151, 2718, 2883, 3132-3, 3682, 3684, 4586-7, 5003, 5690-2, 5697-5700, 5711, 5714, 5866, 5894, 5897, 5926, 6905
- Piricularia*, 740-2, 2547, 2549, 3748, 4338, 4340-3, 5527, 5658, 6364, 6367
- Plasmodiophora*, 200, 2011, 3650, 3674, 5445, 7041
- Pseudomonas*, 1627, 1664, 2105, 3403, 5926, 5928
- Puccinia*, 286, 288-9, 291, 293-312, 315-16, 318-21, 445-6, 479, 1897, 1984, 2247, 2263-7, 2289-92, 2438, 3682, 3748, 3883, 4032, 4035-6, 4073-4, 5486, 5637-8, 5640-1, 5645, 5647, 5845, 5852-3, 5856-8, 5862, 5876, 5880, 5961, 6069-79, 6213, 6380, 6616
- Rhizobium*, 816-8, 854, 1666-7, 6437
- Saccharomyces*, 1723, 3448
- Sclerotinia*, 5253
- Streptococcus*, 5328
- Streptomyces*, 6522
- Synchytrium*, 938, 2719, 3682, 4590, 5701-2
- Tilletia*, 5655-6, 6062
- Uromyces*, 6274, 7151
- Ustilago*, 476, 1896, 2260, 2288, 5652, 5654-6, 5669, 5671, 5859, 5883
- Venturia*, 2997, 5756
- Verticillium*, 2790-1, 4658-60, 5826, 5832
- Viruses, 656, 1058, 1155, 1175, 1635, 2913, 5234, 5926, 6668
- Xanthomonas*, 737, 5823

Physiology

- Forest trees, 1398, 1420
- Gossypium*. Cotton, 5901
- Psidium*. Guava, 4947
- Saccharomyces*, 3441
- Triticum*. Wheat, 384, 3662, 5459
- Zea*. Maize, 520

Phytophaga

- Triticum*. Wheat, 5663

Phytophthora

- Capsicum*, 2905, 6730
- Citrus*, 3061-2
- Fragaria*. Strawberry, 218, 1345, 3132-3, 5003, 5919, 6905
- Glycine*. Soya bean, 1669, 7171
- Humulus*. Hop, 2900
- Leguminous forage crops, 820
- Lycopersicon*. Tomato, 200, 3684, 5711-4, 5227, 5893
- Medicago*, 836
- Persea*. Avocado, 6883
- Physiological races, 200, 257, 820, 935-6, 1151, 2718, 2883, 3132-3, 3682, 3654, 4586-7, 5003, 5640-2, 5697-5700, 5711, 5714, 5866, 5844, 5897, 5926, 6905
- Quercus*. Oak, 5064
- Solanum*. Potato, 213, 899-900, 933-7, 1862, 1960, 2674, 2715-8, 3682, 4585-8, 5625, 5689-700, 5845, 5866, 5894-5, 5897, 5926, 5929, 6505, 6521-5

Phytophthora—*continued*

- Taxonomy, 6908
 - Tephrosia*, 1230
 - Theobroma*. Cacao, 1174, 2899, 4779, 6720
- Phytoptus*
- Ribes*. Black currant, 3682, 6772
- Picea*. Spruce
- Breeding, 5105
 - Chromosome number, 1483
 - Clines, 3233
 - Development, 5106
 - Fruit, 7006-7
 - Genetics, 1487
 - Geographical races, 5106-7, 6992
 - Germination, 7005
 - Growth period, 5107
 - Hybridization, 5044
 - Hybridization, interspecific, 1486, 7004
 - Leaf, 1482
 - Meiosis, 1484-5
 - Morphology, 1487
 - Pollen, 7005
 - Pollination, 1486, 5088
 - Polyploidy, 1481-2
 - Quality, of timber, 1488
 - Sterility, self, 5088
- Picloram
- Grasses, 6374
- Pickling quality, *see* quality
- Pigeon pea, *see* *Cajanus*
- Pigmentation, *see* colour
- Pimento, *see* *Capsicum*
- Pine, *see* *Pinus*
- Pineapple, *see* *Ananas*
- Pinus*. Pine
- Aging, 6989
 - Arceuthobium*, 1419
 - Biotypes, 5093, 6951
 - Breeding, 3209, 5090, 6988, 6994
 - Chromosome aberrations, 1474-5, 5094
 - Chromosome morphology, 1473
 - Chromosome number, 6995
 - Cold resistance, 3228, 5102
 - Cork, 1415
 - Cronartium*, 1409, 1411, 1414-5, 1427, 1431-2, 1434, 3777, 5103, 6986, 7002
 - Cylindrocopturus*, 1426
 - Cytoplasmic inheritance, 6991
 - Dendroctonus*, 1416-7
 - Development, 1476, 5095, 6994
 - Ecotypes, 1476
 - γ rays, 6950, 6985
 - Genetics, 1408-9, 1411, 1477, 5104, 6989-90, 6999
 - Geographical races, 1470-2, 3207, 3230, 5043, 5055, 5092, 5102, 6992-3, 7001, 7003
 - Grafting, 1411, 5097
 - Habit, 5055
 - Heat, drought resistance, 3232
 - Height, 6990
 - History and evolution, 6950
 - Hybridization, 1426, 5044
 - Hybridization, interspecific, 1417, 1427, 1467, 1860, 3227-8, 3231, 5091, 6991
 - Hypodermella*, 1480
 - Inbreeding, 1468
 - Indole-3-Acetic Acid, 1415
 - Insects, 5104
 - Leaf, 5091
 - Lophodermium*, 1408, 1428, 1435, 7000
 - Meiosis, 1474
 - Melampsora*, 1412, 7003
 - Multiple Genes, 5103
 - Mutation, induced, 5096
 - Nutrients, 1472
 - Phenols, 5100

Pinus. Pine—continued

- Pissodes*, 3210, 5054
- Plant collections, 3231, 5101
- Pollen, 6995-6
- Pollination, 3204, 5096
- Polyploidy, 6996
- Quality, of timber, 1478, 6997
- Quantitative characters, 3231
- Resin, 1416-7
- Scleroderris*, 7001
- Seed, 5098
- Seed production, 5090
- Seed storage, 5094
- Selection, artificial, 38, 1469, 3229
- Statistics, genetics, 3229
- Taxonomy, 1479, 5100
- Temperature, effect of, 1475
- Terpenes, 1477
- Turpentine, 6998
- Variation, 5092
- Variety trials, 3208-9
- Weight, 5098
- X rays, 1475, 5094
- Xylem, 6999

Piricularia

- Aldolase, 743
- Cereals, 5658
- Chemicals, effect of, 4336-7
- Eleusine*, 206, 5531
- Genetics, 6364
- Lactic dehydrogenase, 743
- Mutation, induced, 4336-7
- Oryza*. Rice, 740-3, 1849, 2546-9, 3703, 3748, 4291, 4332-44, 5500, 5527, 5665, 5929, 6363-7
- Physiological races, 740-2, 2547, 2549, 3748, 4338, 4340-3, 5527, 5658, 6364, 6367

Pissoides

- Pinus*. Pine, 3210, 5054

Pistacia. Pistachio

- Varieties, 4960

Pistil, *see* flower

Pisum. Pea

- Aphanomyces*, 1691, 5313
- Ascochyta*, 5717, 5728, 5730, 5864, 7196
- Ascorbic acid, 1610
- Biotypes, 7190
- Breeding, 195, 2032, 3411, 4399, 5239, 5524
- Cell Division, 19, 3416, 3598, 5310
- Chemicals, effect of, 103, 1682, 1685, 2058, 3467, 3476, 3478
- Chimeras, 3478
- Chromosome aberrations, 103, 171, 1684-5, 3467, 5310, 7185, 7191
- Cold resistance, 3421
- Colour, 97, 1671
- Cycloheximide, 19
- Development, 7191
- Development abnormal, 1677
- Didymella*, 5717
- Erysiphe*, 5734
- Ethyl methanesulphonate, 7185, 7187
- Ethyleneimine, 1683, 7185
- Fertilization, sexual, 1610
- Fungi, 5500, 5726
- Fusarium*, 5926
- γ rays, 1680, 1684, 2057-9, 2061, 2069, 5305
- Genetics, 1675, 1677, 1688, 1968, 3417
- Growth period, 5730, 7193-4, 7196
- Hybridization, graft, 3412
- Hybridization, intergeneric, 5304
- Hybridization, interspecific, 2943, 7183
- Indole-acetic acid, 3419
- Leaf, 1686
- Legislation, 5309
- Lethals, 7182

Pisum. Pea—continued

- Linkage, 1686, 2943, 3411, 7178-81
 - Meiosis, 3415, 3645
 - Mixture of crops or genotypes, 179
 - Mutation, induced, 97, 1678-83, 1685, 1688, 182056-9, 2061, 2069, 3469, 3475-6, 3478, 5305-6, 531778-82, 7184-7,
 - Mycosphaerella*, 5926
 - Neutrons, 2069
 - N*-nitrosoethylurea, 3475
 - N*-nitrosomethylurea, 7184
 - Peronospora*, 3421
 - Phenols, 3598
 - Phenoxyacetic acids, 2116
 - Photoperiodism, 7194
 - Photosynthesis, 1681
 - Pollen, 179, 3415
 - Polyploidy, 3416, 3645, 5310, 7192
 - Protein, 1688, 2100, 3420
 - Quality, for canning, 1675, 1887, 3414, 5312, 7195
 - Quality, of edible product, 1600, 1687, 5300
 - Quantitative characters, 1689
 - Radiation, 103, 1682, 1685, 3416, 3467, 3478
 - Rhizobium*, 818, 3433
 - Seed, 1968, 3412, 3417-8, 7193
 - Segregation, 1679-80, 1683
 - Sitona*, 5735
 - Size, 7193
 - Statistics, experimental designs, 3473
 - Stem, 5306
 - Sterility, fertility, 1675, 5311
 - Sterility, male, 200
 - Symbiosis, 3433
 - Taxonomy, 3418
 - Temperature, effect of, 171
 - Twinning, 3419
 - Uromyces*, 5727
 - Varieties, 243, 1962, 2091, 3254, 3360, 3413-4, 363755, 5307-9, 5518, 7188-9
 - Variety trials, 1600, 1676, 1687, 1694, 3410, 525301-3, 5509, 7172-7
 - Viruses, 1675, 2032, 3800, 5729
 - Water, effect of, 1684, 3417
 - X rays, 1679, 2057, 5311, 7178
 - Yield, 1689
- Plane, *see* *Platanus*
- Plant collections
- Aegilops*, 4045
 - Allium*. Onion, 1506
 - Armoracia*. Horseradish, 1194
 - Brassica*, 5143
 - Brassica*. Kohl rabi, 2665
 - Cannabis*. Hemp, 1041, 2797, 4679
 - Cereals, 284
 - Cocos*. Coconut, 3092, 5364
 - Coffea*. Coffee, 4765
 - Coix*, 6370
 - Coriandrum*, 5156
 - Crop Plants, 254, 3765, 3829-31, 3836-43, 3884, 555605
 - Cucumis*. Melon, 3307, 7076
 - Cucurbits, 4458
 - Fragaria*. Strawberry, 3120, 3129, 6903
 - Fruit crops, 4878, 6787
 - Glycine*. Soya Bean, 5291
 - Gossypium*. Cotton, 2752
 - Grasses, 2562, 3686, 4417, 5561, 5579
 - Hordeum*. Barley, 4245-8
 - Indigofera*, 4541
 - Ipomoea*. Sweet potato, 4612
 - Leguminous forage crops, 4417, 4457, 5561, 5579
 - Lolium*, 2028
 - Malus*. Apple, 6791
 - Medicago*, 2101, 4502, 6438
 - Nicotiana*. Tobacco, 4755

Plant collections—continued

- Olea*. Olive, 4975
- Oryza*. Rice, 228, 2497, 4313
- Passiflora*, 1332
- Pennisetum*, for grain, 2442, 6293
- Phalaris*, 2586
- Phleum*, 2568
- Pinus*. Pine, 3231, 5101
- Pyrus*. Pear, 3009
- Satureja*. Savory, 5156
- Sesamum*. Sesame, 6746
- Setaria*, 4409
- Solanum*. Potato, 929, 2707, 3465, 4576-8
- Sorghum*, for grain, 2442, 2473, 2475, 6321
- Theobroma*. Cacao, 2898, 4774
- Trifolium*, 3803
- Trifolium*. Minor species, 6458
- Triticum*. Wheat, 254, 275, 418, 2240-1, 3835, 3994-5, 5848, 6048-9
- Vegetable crops, 5117
- Vicia*. Broad bean, 7134
- Vigna*. Cowpea, 1633
- Vitis*, 3193-5, 5029, 5745
- Zea*. Maize, 4180, 6204

Plantago

- Chromosome number, 1224
- Taxonomy, 1224

Plantain, *see* *Musa*

Plasmagenes, *see* Cytoplasm

Plasmodiophora

- Brassica*, 2011, 3674, 7041
- Brassica*. Cabbage, 1523-4, 3280-1, 5717
- Brassica*. Rape, 1865, 1875, 6482
- Brassica*. Swede, 3755, 6482
- Brassica*. Turnip, 200, 3650, 5445
- Physiological races, 200, 2011, 3650, 3674, 5445, 7041

Plasmopara

- Helianthus*. Sunflower, 5737
- Vitis*, 5033, 5740-4, 5746-7, 5872-3, 5922-3

Plastids, 78, 3504, 3572

- Beta*. Sugar beet, 3685

- Hordeum*. Barley, 2422

- Larix*. Larch, 5110

- Lycopersican*. Tomato, 3336, 5207

- Medicago*, 4482

- Trifolium*. Red clover, 4360

- Zea*. Maize, 3505

Platanus

- Biotypes, 3222

Pleiotropy, 3686

- Coffea*. Coffee, 6713

- Gossypium*. Cotton, 4634, 6552

- Melilotus*. Seet clover, 6467

Plenodomus

- Medicago*, 1961

Ploughing

- Malus*. Apple, 1255

Plum, *see* *Prunus*

Poa

- Apomixis, 3825, 4403

- Chromosome number, 3825

- Ecotypes, 3825

- Growth period, 195

- Heat, drought resistance, 762

- Hybridization, interspecific, 200, 759, 3681

- Leaf, 760

- Mutation, induced, 195

- Taxonomy, 760

- Ustilago*, 763

- Varieties, 5361

- Variety trials, 4404

- X rays, 195

- Yield, 761

Podosphaera

- Malus*. Apple, 1260, 2992-3, 4904, 5770-1

Pollen, 5357, 5435

- Abies*. Fir, 1490-1

- Ananas*. Pineapple, 3137

- Areca*, 3082

- Beta*. Sugar Beet, 6632

- Brassica*, 1900

- Capsicum*, 1192

- Cereals, 3897

- Citrus*, 6852

- Cocos*. Coconut, 1318, 1329

- Corchorus*. Jute, 1045

- Crop Plants, 3827

- Forest Trees, 3211

- Fragaria*. Strawberry, 2947

- Fruit crops, 4875

- Glycine*. Soya Bean, 5290

- Gossypium*. Cotton, 982, 2756

- Hordeum*. Barley, 1788

- Larix*. Larch, 5111

- Malus*. Apple, 1246, 2982, 6806

- Medicago*, 6413

- Nicotiana*. Tobacco, 1788

- Olea*. Olive, 3093

- Onobrychis*. Sainfoin, 6413

- Oxyccoccus*. Cranberry, 6908

- Phaseolus*, 1623

- Picea*. Spruce, 7005

- Pinus*. Pine, 6995-6

- Pisum*. Pea, 179, 3415

- Prunus*. Peach, 3053

- Prunus*. Plum, 4919, 6841

- Pulses, 179

- Pyrus*. Pear, 1246, 1268, 4909

- Sesamum*. Sesame, 6745

- Solanum*. Potato, 891

- Theobroma*. Cacao, 1173

- Trifolium*, 200

- Trifolium*. Red clover, 848, 4513

- Triticum*. Wheat, 3977-8

- Ulmus*. Elm, 5076

- Vitis*, 3175-6

- Zea*. Maize, 564-5, 2379, 5516, 6168

Pollination

- Acer*, for sugar, 4741

- Arachis*. Groundnut, 1311

- Arrhenatherum*, 2583

- Astragalus*, 4539

- Avena*. Oats, 635, 2274

- Averrhoa*, 3096

- Bambusa*, 2831

- Beta*. Sugar beet, 1088

- Brassica*. Cabbage, 5145-6

- Brassica*. Rape, 251

- Bromus*, 776-7

- Cajanus*, 7199

- Capsicum*, 4828

- Carthamus*, 1997

- Castanea*. Chestnut, 3076

- Cereals, 280, 3889

- Citrullus*. Water melon, 3245, 5171

- Cocos*. Coconut, 6875

- Corchorus*. Jute, 4684-5

- Crop plants, 3824

- Cucurbits, 7067

- Cuminum*. Cumin, 6760

- Cydonia*. Quince, 6829

- Daucus*. Carrot, 7024

- Forest trees, 3205

- Fragaria*. Strawberry, 5002

- Glycine*. Soya Bean, 1653

- Gossypium*. Cotton, 2066, 2741, 2770-1, 4646-7, 4651,

- 6011, 6429, 6568-9

- Grasses, 4415

- Helianthus*. Sunflower, 1889

- Hordeum*. Barley, 635, 4236

Pollination—continued

- Ipomoea*. Sweet Potato, 2726, 4611
- Juglans*. Walnut, 1299
- Lespedeza*, 2656, 4530
- Lolium*, 783
- Lycopersicon*. Tomato, 3334, 3350, 5220
- Malus*. Apple, 2981, 4884, 6803-4
- Medicago*, 4359, 4500
- Melilotus*. Sweet Clover, 4370
- Nicotiana*. Tobacco, 1142, 4746, 4749
- Oryza*. Rice, 730, 6330
- Persea*. Avocado, 6879-82, 6886
- Picea*. Spruce, 1486, 5088
- Pinus*. Pine, 3204, 5096
- Prunus*. Apricot, 6835
- Prunus*. Peach, 1284
- Pyrus*. Pear, 1266
- Ribes*. Black currant, 6891
- Ricinus*. Castor oil plant, 1203
- Saccharum*. Sugar cane, 2831
- Secale*. Rye, 2004, 4089
- Solanum*. Potato, 4572
- Sorghum*, for grain, 684
- Trifolium*. Minor species, 2649
- Trifolium*. Red clover, 251, 847, 851, 6447-9
- Triticum*. Wheat, 333, 337, 396, 1993, 2052, 2168, 3744, 3974, 5977, 6020, 6034-5
- Vegetable crops, 1495
- Vicia*. Broad Bean, 1609, 3366, 5486, 7134-5
- Vigna*. Cowpea, 229
- Vitis*, 5011, 5022, 6927-30
- Zea*. Maize, 517, 554-7, 2004, 2340, 2374, 2379, 4121-2, 4134, 4173-4, 6173, 6184-9

Pollution, atmospheric

- Lactuca*. Lettuce, 6790
- Lycopersicon*. Tomato, 6790
- Pome fruits, 6790
- Prunus*. Plum, 6790

Polyembryony

- Areca*, 4971
- Citrus*, 4866
- Citrus*. Orange, 4941
- Mangifera*. Mango, 4949
- Theobroma*. Cacao, 2897, 4776

Polygenes, see multiple genes

Polygonum

- Sterility, fertility, 2937
- Tannin, 2937, 6762

Polyhaploidy

- Beta*. Sugar beet, 1110
- Solanum*. Potato, 2700

Polymeric genes, see multiple genes

Polyphenoloxidase

- Beta*. Sugar beet, 6635
- Solanum*. Potato, 6515

Polyploidy, 118, 152, 1098, 3482, 3590, 3615, 5373, 5427-8

- Agropyron*, 810-1, 2607, 4451, 6412
- Allium*, 174, 1813, 1825, 5134
- Allium*. Chives, 5138
- Allium*. Onion, 123, 175-6
- Amelanchier*, 1296, 5536
- Arachis*. Groundnut, 1307, 4785
- Armoracia*. Horseradish, 2941
- Asparagus*, 1517, 7035
- Avena*. Oats, 2281, 2283, 4061
- Axonopus*, 6405
- Beta*, 200, 6477
- Beta*. Mangel, 4544, 6478, 6633
- Beta*. Sugar beet, 188-9, 1075, 1079, 1081-7, 1089-90, 1092-7, 1099-109, 1112-3, 2084, 2857-8, 2860, 3677, 3685, 3823, 4718-26, 4740, 5486, 5502, 5794, 6478, 6628-31, 6632-4, 6638
- Brassica*, 3633
- Bromus*, 777
- Candida*, 1712, 5331

Polyploidy—continued

- Carthamus*. Safflower, 6759
- Cenchrus*, 4444
- Chloris*, 1903
- Cicer*. Chickpea, 3424
- Citrullus*. Water melon, 5170-1, 7078-9
- Coffea*. Coffee, 1165, 2892, 6712
- Commelina*, 1854
- Corchorus*. Jute, 2805, 6589
- Crataegus*, 6831
- Crop plants, 248, 1976, 4363, 5440, 5601
- Cucumis*. Minor species, 7091
- Cucurbita*, 7081
- Cuminum*. Cumin, 2902
- Cymbopogon*, 4823
- Cynodon*, 767, 769
- Dactylis*, 1879
- Dichanthium*, 4438
- Digitaria*, 805
- Dioscorea*. Yam, 1122
- Dolichos*, 7157
- Fagopyrum*. Buckwheat, 3484
- Festuca*, 1864, 2580-1, 3686, 3787, 4434-5, 6395
- Forest trees, 3483
- Fragaria*. Strawberry, 4995, 5534, 6899, 6902
- Gossypium*. Cotton, 995, 2757, 2767, 4643-4, 6554
- Grasses, 752, 1870, 3677, 4364
- Hibiscus*, 6592
- Hordeum*. Barley, 3686, 4234, 5534, 5538, 6111
- Humulus*. Hop, 2026, 2900
- Ipomoea*. Sweet potato, 6535
- Larix*. Larch, 3237
- Lolium*, 782-3, 2092, 2570, 2581, 3643, 4362, 4429, 4433, 5438, 5486, 6384-7
- Lotus*. Birdsfoot trefoil, 1864
- Lupinus*. Lupin, 3664, 3686, 5469, 6469
- Lycopersicon*. Tomato, 5217, 7110, 7112
- Malus*. Apple, 1251, 2085, 6773
- Matricaria*, 4821
- Medicago*, 2625, 3646, 5441, 6428
- Melilotus*. Sweet clover, 872-3
- Mentha*, 5324
- Momordica*, 1552
- Morus*. Mulberry, 3066, 6861
- Musa*. Banana, 5005
- Nicotiana*. Tobacco, 2037, 2866, 2879, 3519, 4753-6685
- Onobrychis*. Sainfoin, 4529
- Oryza*. Rice, 727-8, 2477, 2511, 2529, 4316-7
- Panicum*, 4445, 4409, 6285
- Pennisetum*, for grain, 6298
- Phaseolus*, 1621
- Picea*. Spruce, 1481-2
- Pinus*. Pine, 6996
- Pisum*. Pea, 3416, 3645, 5310, 7192
- Populus*. Poplar, 1454-6, 5068
- Pome fruits, 4859
- Prunus*. Cherry, 4858
- Prunus*. Plum, 1274, 2948, 4858
- Pyrus*. Pear, 2085, 4909
- Raphanus*. Radish, 3261, 5125
- Ribes*, 4860-1
- Rubus*. Blackberry, 3104
- Rumex*. Sorrel, 3501, 7056
- Saccharomyces*, 89, 1728, 5340-2
- Saccharum*. Sugar cane, 2831
- Secale*. Rye, 247-8, 270, 484, 2084, 2299, 3484, 3643, 3665, 4086-90, 5470, 5648, 5938, 5940, 5989, 6110
- Setaria*, 229, 2029
- Solanum*, for fruit, 3357
- Solanum*. Potato, 898-9, 2696-7, 2943, 4551, 4552, 4570, 4578, 6496, 6509-10
- Sorghum*, 678, 681, 4276, 6319
- Sorghum*, for sugar, 1070-1
- Spartina*, 4448

Polyploidy—continued

- Spinacia*. Spinach, 5158
- Thea*. Tea, 4760
- Trigonella*, 1897
- Trifolium*, 200
- Trifolium*. Alsike clover, 195, 2643
- Trifolium*. Minor species, 4522, 5522
- Trifolium*. Red clover, 195, 198, 845–50, 2635, 2638, 3643–4, 3699, 4360–1, 4513, 4517, 5439
- Trifolium*. White clover, 1864, 6452
- Triticum*. Wheat, 112, 248, 347, 382, 435, 2223, 3740–1, 3823, 3959, 3963, 5617, 5648, 5989, 6022, 6027–9, 6067
- Ulmus*. Elm, 5075
- Vaccinium*, 1962
- Verbena*, 4824
- Vicia*. Broad bean, 3365
- Vicia*. Vetch, 2061
- Vitis*, 5021
- Zea*. Maize, 2350, 2368, 3645, 3823, 6152, 6177
- See also amphidiploidy
- Polysomaty, see mixoploidy
- Polysomics, see aneuploidy
- Polyspora
- Linum*. Flax, 5909
- Polystigma
- Prunus*. Plum, 4921, 5784
- Pome fruits
- Chimeras, 4845
- Pollution, atmospheric, 6790
- Polyploidy, 4859
- Quality, for conserving, 6782
- Quality, for storage, 1243, 6782
- Pomegranate, see *Punica*
- Pomelo, see *Citrus*
- Poncirus*
- Chimeras, 4942
- Essential oil, 3063
- Hybridization, intergeneric, 3063
- Quality, of edible product, 6792
- Radiation, 4845
- Segregation, 4942
- Sterility, fertility, 2957
- Stomata, 4880
- Popcorn, see *Zea*
- Poplar, see *Populus*
- Poppy, see *Papaver*
- Population genetics, 13, 18, 34, 80–4, 1768, 1777, 1795–7, 1799–800, 3536–8, 3548, 3574–7, 3586, 3654, 3734–6, 5396–403, 5406–7, 5409, 5451
- Agrostis*, 6376
- Beta*. Sugar beet, 1107
- Cereals, 273
- Forest trees, 1394
- Glycine*. Soya bean, 5292
- Gossypium*. Cotton, 4631
- Hordeum*. Barley, 1798, 2407
- Lolium*, 6389
- Nicotiana*. Tobacco, 1138
- Phaseolus*. Lima bean, 1632, 1798, 5279
- Vicia*. Broad bean, 3364
- Zea*. Maize, 31
- Populus*. Poplar
- Anatomy, 5087
- Bacteria, 1451
- Biochemistry, 1418
- Breeding, 6952
- Chionaspis*, 5072
- Colchicine, 1455–6
- Cold resistance, 5070–1, 6952
- Cryptorhynchus*, 5072
- Development, 3217
- Dothichiza*, 3219
- Drepanopeziza*, 6973
- Ecotypes, 6972

Populus. Poplar—continued

- Flower, 5069
- Fungi, 1422, 5925
- Genetics, 1446, 6966
- Gloeosporium*, 1430
- Growth period, 5067, 5069, 5071
- Heat, drought resistance, 6968
- History and evolution, 5087, 6967
- Hybridization, 1447, 6964
- Hybridization, graft, 1453
- Hybridization, interspecific, 1430, 1449–51, 1454, 1458, 3216, 5039, 5066, 6953, 6965–8, 6972
- Land races, 6971
- Leaf, 1447, 5066, 5087
- Marssonina*, 1407, 3220
- Melampsora*, 1410, 1418, 1451, 3218, 6974–5
- Melanophila*, 6976
- Mutation somatic, 1452
- Phloemyzus*, 5072
- Polyploidy, 1454–6, 5068
- Quality, of timber, 3212
- Quantitative characters, 6964
- Saperda*, 5072
- Sciapteron*, 5072
- Sex, 6956
- Statistics, biometry, 3217
- Stem, 6966
- Taxonomy, 1458, 6971
- Valsa*, 1413
- Variation, 1413
- Varieties, 5067, 6951, 6969–70
- Variety trials, 1445, 5039, 5070, 6962–3
- Vegetative reproduction, 1457
- Viruses, 6977
- Waterlogging, 6972
- Potassium
- Eragrostis*, 2601
- Gossypium*. Cotton, 6583
- Potato, see *Solanum*
- Pratylenchus*
- Nicotiana*. Tobacco, 4757
- Secale*. Rye, 3753
- Thea*. Tea, 1160, 6711
- Prickles, see spines
- Protein, 1785, 3568
- Aegilops*, 3992
- Beta*. Sugar beet, 4736
- Brassica*, 3633, 7054
- Glycine*. Soya bean, 1642, 1656, 3397
- Gossypium*. Cotton, 1930, 2778
- Hordeum*. Barley, 4241–3
- Ipomoea*. Sweet potato, 2033
- Juglans*. Walnut, 6867
- Leguminous forage crops, 6414
- Lens*. Lentil, 3630
- Lolium*, 3622, 5462
- Medicago*, 835, 1992, 2626–7, 4469
- Nicotiana*. Tobacco, 1134
- Oryza*. Rice, 4293
- Papaver*. Poppy, 1178
- Pennisetum*, 4446, 6300
- Phaseolus*, 127, 3626, 5466, 7148
- Pisum*. Pea, 1688, 2100, 3420
- Prunus*. Peach, 4934
- Puccinia*, 5961
- Secale*. Rye, 2100
- Solanum*. Potato, 2702, 2704, 4575
- Sorghum*, for grain, 2462
- Spinacia*. Spinach, 3633
- Trifolium*. Minor species, 4522
- Triticum*. Wheat, 2028, 2193, 2238, 3625, 3697, 3991–2, 5465, 5998
- Zea*. Maize, 519, 564, 570, 575–6, 2328, 4104, 6125, 6142, 6154, 6199–201

Protons

Brassica. Cabbage, 3278

Protoperce

Lycopersicon. Tomato, 2007

Nicotiana. Tobacco, 2007

Provenance types, *see* geographical races

Pruning

Malus. Apple, 1242, 4894-7

Pyrus. Pear, 1242, 1269, 4912

Triticum. Wheat, 6047

Vitis, 1376, 5023

Prunus

Breeding, 3079, 6869

Bud failure, 6869

Cold resistance, 3693, 4959

Cuttings, 3078

Flower, 4959, 6870

Growth period, 3079

Heat, drought resistance, 4959

Hybridization, interspecific, 1887, 3049, 3078, 3693, 6845, 6847

Micurinism, 6845

Root, 3049

Sclerotinia, 3080

Sterility, fertility, 4959

Varieties, 1304

Prunus

Apricot

Bacteria, 1965

Cold resistance, 3018

Cytospora, 5778

Fertilization, sexual, 1271

Fruit, 1273

Fungicides, 2957

Mutation, 3016

Pollination, 6835

Sterility, fertility, 1272, 2957, 6835

Varieties, 1238, 3017, 4914-5

Viruses, 3019

Prunus

Cherry

Breeding, 3754, 4913

Coccomyces, 5781

Cold resistance, 2948, 3039

Ecotypes, 3035

Genetics, 3032

Height, 1283

Higginsia, 3040

Hybridization, 4922

Hybridization, interspecific, 1280, 2948, 4858, 6845

Land races, 3036

Meiosis, 3037

Micurinism, 6845

Mutation, induced, 2077, 3034

Mutation, spontaneous, 5433

Nectar, 4926

Polyploidy, 4858

Quality, for canning, 3036

Quality, for conserving, 1282

Quality, for storage, 1281, 3038

Quality, of edible product, 4913

Radiation, 2077

Reproduction, 4925

Sterility, fertility, 1280, 4927

Variation, 3033

Varieties, 220, 1278-9, 3034, 4923-5, 6846

Variety trials, 1279, 3031, 6843-4

Viruses, 1283, 3041-2

X rays, 3034

Prunus

Nectarine

Varieties, 4937

Variety trials, 6833

Prunus

Peach

Biochemistry, 4934

Breeding, 2951, 3047-8

Ceratis, 3048

Cold resistance, 1965, 3054-5, 3776

Prunus

Peach—*continued*

Germination, 6851

Growth period, 4933

Heat, drought resistance, 4932

Hybridization, interspecific, 3049, 6845, 6847

Meloidogyne, 1239

Micurinism, 6845

Nectar, 1284

Photosynthesis, 4932

Pollen, 3053

Pollination, 1284

Protein, 4934

Quality, for canning, 4935

Quality, for freezing, 2959

Quality, of edible product, 1285

Respiration, 4932

Root, 3049

Sugar, 4934

Taphrina, 3048

Varieties, 3047, 3050-2, 3773, 4863, 4928-31, 553

6848-9

Variety trials, 1285, 3044-6, 6833

Venturia, 3048

Viruses, 3043, 3053

Water balance, 4932, 6850

Xanthomonas, 4936

Prunus

Plum

Aging, 6840

Amphidiploidy, 4855

Aspidiotus, 5772

Breeding, 2951, 5913

Chromosome number, 2948

Climate, 2956

Cold resistance, 1277, 4920, 6842

Cuttings, 4918

Cytoplasmic inheritance, 3671, 5476

Development, 1276

Fruit, 3023, 3775

Genetics, 3775

Hybridization, 2948

Hybridization, interspecific, 1274, 2948, 4855, 4858

Insects, 5771

Longevity, 6840

Meiosis, 2948, 3022

Pollen, 4919, 6841

Pollution, atmospheric, 6790

Polyploidy, 1274, 2948, 4858

Polystigma, 4921, 5784

Quality, of edible product, 3024, 4913

Root, 1276

Sterility, fertility, 3774

Sterility, male, 3022, 3671, 4917, 5476

Tetrazolium salts, 6841

Varieties, 1275, 2956, 4920, 6837-9

Variety trials, 3020-1, 3025, 6836

Viruses, 2960-1, 3026-30

Psalliotia

see Agaricus

Pseudomonas

Arachis. Groundnut, 1314

Biochemistry, 2105

Crop plants, 5928

Glycine. Soya Bean, 1664, 3402-3, 7170

Lens. Lentil, 1695

Lycopersicon. Tomato, 5225

Musa. Banana, 2105

Nicotiana. Tobacco, 6648, 6651

Phaseolus, 1627, 5270-1, 5276, 5926

Physiological races, 1627, 1664, 2105, 3403, 5926, 5928

Solanum. Egg plant, 5225

Solanum. Potato, 2713

Sorghum, for grain, 691, 4282

Pseudoperonospora

Humulus. Hop, 5870, 5914

Pseudopeziza

Cucumis. Melon, 2005

- Pseudopeziza*—continued
Medicago, 837
Ribes. Gooseberry, 6772
Pseudotsuga. Douglas fir
 Biotypes, 3239
 Cold resistance, 5052
 Development, 5052
 Genetics, 1492, 3239
 Geographical races, 5052, 5113, 6955
 Geography, 3238
 Heat, drought resistance, 5113
 Hybridization, interspecific, 3238
Psidium. Guava
 Breeding, 1844, 4946
 Development, 4947
 Physiology, 4947
Psylla
Malus. Apple, 6777-8
Puccinia
Aegilops, 3935, 5486
Agropyron, 443, 5994
Allium. Leek, 3682
Avena. Oats, 307-8, 310-2, 477-9, 1963, 2289-2, 3682, 4071-6, 5862, 6107
 Biochemistry, 4036
 Cereals, 286, 309, 321, 2106, 2146, 5961
Cynodon, 6380
 Genetics, 2263
Helianthus. Sunflower, 3849, 4805, 5736
 Heterocaryosis, 4037
 History and evolution, 2146
Hordeum. Barley, 292, 651, 1896-7, 1963, 2147, 2438, 4253-4, 5926, 6264, 6269
Lolium, 2577, 4432
Mentha, 7204
 Mutation, spontaneous, 6079
Phleum, 2568
 Physiological races, 286, 288-9, 291, 293-312, 315-16, 318-21, 445-6, 448, 479, 1897, 1984, 2247, 2263-7, 2292-7, 2438, 3682, 3748, 3883, 4032, 4035-6, 4073-4, 5486, 5637-8, 5640-1, 5645, 5647, 5845, 5852-3, 5862-8, 5876, 5880, 5961, 6069-79, 6213, 6380, 6616
 Protein, 5961
Saccharum. Sugar cane, 1902, 6616
Secale. Rye, 3941, 4082, 5648, 5959
 Segregation, 1708, 5858
Triticum. Wheat, 189, 212, 225, 287-91, 293-306, 312-20, 338, 370, 437-51, 1897, 1899, 1988, 1990, 2047, 2147, 2156, 2247, 2261-8, 3675, 3682, 3749, 3802, 3881-3, 3935, 3941, 3999, 4026-39, 4082, 5486, 5500, 5637-49, 5653, 5686, 5688, 5844-5, 5852-4, 5857-8, 5860, 5876, 5880-2, 5994, 6004, 6064-80
Zea. Maize, 212, 588-9, 3748, 4191, 5527, 5533, 5860, 5885, 6213
Pulmonaria
 Boron, 6765
 Heterostyly, 6765
 Pulses
Acyrtosiphon, 1612
 Breeding, 1601
 Growth period, 5603
 Miçurinism, 5603
 Photoperiodism, 5242
 Pollen, 179
 Quality, for cooking, 1602-3
 Varieties, 7131
 Variety trials, 1599, 1690, 7130
 Pumpkin, *see* cucurbita
 Punched cards
Vitis, 1379, 5749
Punica. Pomegranate
 Meiosis, 1903
 Purine derivatives
Vicia. Broad bean, 158
Pyrenochaeta
Allium. Onion, 5133
Pyrenophora
Avena. Oats, 4075
Hordeum. Barley, 648, 1963, 5614, 5657
 Pyrethrins
Chrysanthemum, as insecticide, 6771
 Pyridinium salts
Allium. Onion, 164
 Pyrogallol
Vicia. Broad bean, 5426
Pyrus. Pear
 Anthocyanin, 6821
 Biochemistry, 3008, 3011
 Breeding, 4856
 Chimeras, 4906
 Cold resistance, 1256, 2962, 6825-7
 Colour, 1262, 1964
 Development, 1242
Eriophyes, 5763
Erwinia, 1965, 3011
Fabreaa, 5763
 Flower, 4856
 Fungi, 4880
 Fungicides, 6793
 Genetics, 1964, 4906, 6821
 Gibberellins, 6786
 Growth period, 6826
 Habit, 4856
 History and evolution, 4908
 Hybridization, intergeneric, 6786
 Hybridization, interspecific, 3004, 5756, 5763
 Land races, 6823
 Mercuran, 2085
 Mutation, 4906
 Mutation, somatic, 1263, 3670, 5475
 Nucleic acids, 6824
 Parthenocarp, 6827
 Pathology, 3010
 Plant collections, 3009
 Pollen, 1246, 1268, 4909
 Pollination, 1266
 Polyploidy, 2085, 4909
 Pruning, 1242, 1269, 4912
 Quality, for freezing, 2959
 Quality, for storage, 4911
 Quality, of edible product, 4910
 Selection, artificial, 6822
 Stomata, 4909
 Taxonomy, 3008
 Varieties, 220, 1264-5, 3005-7, 4907-8
 Variety trials, 4905, 6820
Venturia, 3686, 5756-7, 5760
 Viruses, 4862, 6828
 Water balance, 6825
See also Malus. Apple
Pythium
Zea. Maize, 2371, 2373
 QUALITY
 Crop plants, 5480, 5604
Pisum. Pea, 5300
Triticum. Wheat, 1970, 1999
Vitis, 3177
 Quality, for canning
Ananas. Pineapple, 1364
 Fruit crops, 1872
Ipomoea. Sweet potato, 2014
Lycopersicon. Tomato, 1583-4, 1887, 5199, 5214, 7115
Malus. Apple, 2989, 6812
Phaseolus, 5266-7
Pisum. Pea, 1675, 1887, 3414, 5312, 7195
Prunus. Cherry, 3036
Prunus. Peach, 4935
Ribes. Black currant, 4877

Quality, for canning—*continued*

Ribes. Red currant, 4877
Triticum. Wheat, 1970, 6032
 Vegetable crops, 1872
Zea. Sweet corn, 601

Quality, for conserving

Pome fruits, 6782
Prunus. Cherry, 1282

Quality, for cooking

Oryza. Rice, 4291, 6354
Phaseolus, 200, 5269, 7147
 Pulses, 1602-3
Solanum. Potato, 923, 6515-6

Quality, for drying

Allium. Onion, 5130-1

Quality, for fermentation

Aspergillus, 5330
Saccharomyces, 1723, 1728, 3139, 3451-2, 5343, 7224-5, 7227
Schizosaccharomyces, 5343, 5348

Quality, for freezing

Brassica. Cauliflower, 3755
Fragaria. Strawberry, 2959
Malus. Apple, 2959
Phaseolus, 7146
Prunus. Peach, 2959
Pyrus. Pear, 2959
Rubus. Raspberry, 2959
Vaccinium, 2959, 3112
 Vegetable crops, 1501

Quality, for hopping

Humulus. Hop, 1186, 2900

Quality, for malting and brewing

Hordeum. Barley, 640-4, 2405, 2426-30, 4205-6, 4240, 6231-2, 6234-5, 6267-8

Quality, for milling and baking

Cereals, 3880
Oryza. Rice, 2526, 6355
Secale. Rye, 2300, 3940, 4092
Sorghum, for grain, 2470
Triticum. Wheat, 200, 261, 338, 370, 403-16, 420, 1909, 1999, 2170, 2173, 2175, 2209-11, 2222, 2231-7, 2255, 2268, 3621, 3873, 3887, 3912, 3940, 3981-9, 5522, 5946, 5969, 5972, 6031, 6043-4

Quality, for smoking

Nicotiana. Tobacco, 1143-4, 1963, 2867, 3519, 3751, 6671, 6698

Quality, for storage

Allium. Onion, 5132
Citrus. Mandarin, 4943
Cucumis. Melon, 7075
Dioscorea. Yam, 1124
Ipomoea. Sweet potato, 6539
Lycopersicon. Tomato, 3351
Malus. Apple, 1254, 2986-8, 4893, 6810-1
 Pome fruits, 1243, 6782
Prunus. Cherry, 1281, 3038
Pyrus. Pear, 4911
Rhizobium, 5327
Solanum. Potato, 6516
Triticum. Wheat, 430
Vitis, 3178-9, 6938
Zea. Maize, 4195

Quality, for transporting

Fragaria. Strawberry, 3128
Lycopersicon. Tomato, 5222
Vitis, 3180-2, 5013

Quality, nutritive value

Allium. Garlic, 3270
Allium. Onion, 5129
Arracacia, 6483
Avena. Oats, 2138
Beta. Mangel, 2664
Beta. Sugar beet, 4732, 4734
Brassica. Kale, 1526

Quality, nutritive value—*continued*

Brassica. Rape, 4416
Bromus, 5534
Capsicum, 2906, 2912
Chlorella, 1699
 Crop plants, 5467
Cucumis. Melon, 3306
Cynodon, 770
Dactylis, 1866, 4358
Eleusine, 1835
Fragaria. Strawberry, 2949, 3125-7
 Grasses, 754, 1869, 4416
Hordeum. Barley, 2425
Juglans. Walnut, 3074
 Leguminous forage crops, 4416
Lolium, 4430-1
Lycopersicon. Tomato, 1566, 1582, 1753, 3335, 7098-9, 7114-5
Malus. Apple, 6808-9
Medicago, 832-3, 1992, 2619, 4467, 6422, 6425
Morus. Mulberry, 3067, 6862-3
Panicum, for grain, 1835
Pennisetum, for grain, 1835
Phalaris, 5568
Phaseolus, 3378, 5269
Ribes. Black currant, 4986-7
Secale. Rye, 486
Setaria, 1835
Solanum. Potato, 2685, 2703, 6514, 6519
Sorghum, 281, 674, 1835, 2469, 2594
Torula, 3455
Trifolium. Minor species, 4522
Trifolium. Red clover, 2638
Trifolium. Subterranean clover, 2032
Trifolium. White clover, 6452
Triticum. Wheat, 281, 2238, 6032
Vitis, 3164
Zea. Maize, 213, 569, 2365, 2382, 4180, 6150, 6180, 6190

Quality, of edible product, 5352
Benincasa, 5174
 Cereals, 3899
Citrus, 3057
Citrus. Lemon, 2079
Coffea. Coffee, 2893, 3751
 Crop plants, 3619, 3828, 5461
Cucurbita, 7080, 7082
Daucus. Carrot, 3258-9
Fragaria. Strawberry, 1238, 3124, 4996
 Fruit crops, 3640, 4876
Glycine. Soya bean, 1655
Ipomoea. Sweet potato, 2727, 3768, 4609
Juglans. Walnut, 1297
Lycopersicon. Tomato, 1565, 3352, 3636, 7100
Malus. Apple, 2985, 4864
Oryza. Rice, 732, 2535, 6351
Oxycoccus. Cranberry, 6909
Phaseolus, 1600
Pisum. Pea, 1600, 1687, 5300
 Pome fruits, 6792
Prunus. Cherry, 4913
Prunus. Peach, 1285
Prunus. Plum, 3024, 4913
Pyrus. Pear, 4910
Raphanus. Radish, 3261
Ribes. Black currant, 3641, 4986-7
Ribes. Gooseberry, 3641
Ribes. Red currant, 3641, 4877
Saccharum. Sugar cane, 4695
Solanum. Egg plant, 5236
Solanum, for fruit, 7125
Solanum. Potato, 891, 921-2, 2681, 4568, 6494
Thea. Tea, 1157-8, 2891
 Vegetable crops, 3640
Vitis, 1381-2, 3192, 5011, 5018, 5024, 6914, 6923, 6936-7

Quality, of edible product—*continued*
Zea. Maize, 4127, 6196, 6210
Zea. Popcorn, 493

Quality, of fibre
Cannabis. Hemp, 1040, 2799, 2802, 4679
Ceiba. Kapok, 4669
Gossypium. Cotton, 983, 1005, 1015-8, 1934, 1941, 1945, 2063, 2751, 2758, 2779-81, 4627, 4650-1, 4665, 6556, 6571-4
Linum. Flax, 1032, 1035, 4673-4

Quality, of timber
Betula. Birch, 6979
 Forest trees, 1401, 5061
Lithocarpus, 6982
Picea. Spruce, 1488
Pinus. Pine, 1478, 6997
Populus. Poplar, 3212
Salix. Willow, 3212

Quality, of wine
Vitis, 1366, 1383-6, 3147, 3151, 3162-3, 3170, 3173, 3183-8, 5018, 5025-8, 5748, 6935, 6939-40

Quantitative characters, 1800, 3544, 3549, 3652, 5449
Arachis. Groundnut, 4962, 6873
Betula. Birch, 6980
Brassica. Sarson, 1846
Brassica. Sprouting broccoli, 3285
 Cereals, 3874
 Crop plants, 3651, 3655, 5447-8, 5452
Dactylis, 4419-20
Festuca, 787
 Forest trees, 1440
Fragaria. Strawberry, 1348, 6895
Glycine. Soya bean, 1645, 3390, 5286, 7163
Gossypium. Cotton, 983-4, 993, 1845, 1945, 4668
Hordeum. Barley, 2125, 2435, 3896, 4219, 6269-70
Leucaena, 4409
Lotus. Birdsfoot trefoil, 2663
Luffa, 1053
Malus. Apple, 200
Medicago, 3668-9, 5473-4
Nicotiana. Tobacco, 1127, 1132, 1846, 2871-2
Oryza. Rice, 2506, 4296, 4325
Papaver. Poppy, 6723
Pennisetum, for grain, 4257
Phaseolus, 7141
Pinus. Pine, 3231
Pisum. Pea, 1689
Populus. Poplar, 6964
Saccharum. Sugar cane, 1068, 2824
Secale. Rye, 3896
Sesamum. Sesame, 2925
Sorghum, 1846, 2459, 4270, 4441
Theobroma. Cacao, 1172, 2020
Trifolium. Minor species, 2648, 4522
Trifolium. White clover, 858
Triticum. Wheat, 100-1, 2125, 2166, 2174, 2184, 3896, 3968-9, 5971, 5979
Vicia. Vetch, 4524
Zea. Maize, 2347, 2366, 4136, 4152, 6150

Quercus. Oak
 Ecology, 1444
 γ rays, 6950
 Grafting, 3214
 History and evolution, 3213, 6950
 Hybridization, interspecific, 1442-3, 3213, 5063, 6960-1
Phytophthora, 5064
 Taxonomy, 3213, 3215
 Variation, 1444

Quince, *see Cydonia*

RACES, *see* geographical races, land races and physiological races

Radiation, 136, 169, 3580, 3584, 3605
Ananas. Pineapple, 3138
Arachis. Groundnut, 1955

Radiation—*continued*
Beta. Sugar beet, 2084
 Cereals, 282
Coriandrum, 7201
 Crop plants, 137, 239, 1801, 1976, 2088, 5591
Glycine. Soya bean, 1647, 2055
Hordeum. Barley, 90, 119, 2415-6, 3900, 4209, 4215, 5424
Lycopersicon. Tomato, 91, 1573, 1753, 3328
Malus. Apple, 87, 1963, 3754
Oryza. Rice, 714, 729, 6333
Phaseolus, 2055
Pisum. Pea, 103, 1682, 1685, 3416, 3467, 3478
 Pome fruits, 4845
Prunus. Cherry, 2077
Rumex. Sorrel, 3501
Saccharomyces, 89, 1713, 5334
Secale. Rye, 2084
Solanum. Potato, 903, 2074
Trifolium. Subterranean clover, 861
Triticum. Wheat, 101, 122, 341, 352, 355, 2044
Vicia. Broad bean, 167, 170, 5404
Zea. Maize, 90, 539, 2053-4, 3471

Radioactive isotopes
Allium. Onion, 1508
Gossypium. Cotton, 2065, 2067, 2760
Lycopersicon. Tomato, 2069
Oryza. Rice, 2532, 6332
Saccharomyces, 1718
Vicia. Broad bean, 1783

Radish, *see Raphanus*

Rai, *see Brassica*

Ramularia
Coriandrum, 5326

Ramulispora
Sorghum, for grain, 2475

Rape, *see Brassica*

Raphanus. Radish
 Apomixis, 5142
 Genetics, 1503
 Growth period, 1865, 3257
 Heterosis, 1503
 Hybridization, interspecific, 1861
 Inbreeding, 1504
 Matrocliny, 5142
 Multiple alleles, 7028
 Mutation somatic, 1504
 Photosynthesis, 5125
Phylloreta, 1530
 Polyploidy, 3261, 5125
 Quality, of edible product, 3261
 Root, 1504
 Sterility, self, 7028
 Varieties, 3254, 5124, 7027
 Variety trials, 7026

Raspberry, *see Rubus*

Rays, *see radiation*

Recessiveness, *see* dominance

Recombination, *see* segregation

Recombination, mitotic, *see* mitotic recombination

Recombination, somatic, *see* mitotic recombination

Red clover, *see Trifolium*

Red currant, *see Ribes*

Red rot
Oryza. Rice, 2544

Reduction division, *see* meiosis

Reductones
Vitis, 6940

Reed grass, *see Phalaris*

Reproduction
Arachis. Groundnut, 4965
Areca, 3083
Pennisetum, 6301
Phaseolus. 7140
Phormium, 2813

Reproduction—continued

Prunus. Cherry, 4925

Solanum. Potato, 2701

Resin

Pinus. Pine, 1416-7

Respiration

Beta. Sugar beet, 6631

Hordeum. Barley, 62

Prunus. Peach, 4932

Saccharomyces, 1730, 3446-7, 5344, 7228

Zea. Maize, 631

Rhizobium

Glycine. Soya bean, 818, 1665-7, 3404-5

Leguminous forage crops, 814, 816, 819, 2630, 5567, 6415

Lespedeza, 817

Lotus. Birdsfoot trefoil, 817-8

Medicago, 815-9, 2028, 2630, 6437

Mutation, 5567

Physiological races, 816-8, 1854, 1666-7, 6437

Pisum. Pea, 818, 3433

Quality, for storage, 5327

Symbiosis, 3433

Trifolium, 815-8

Trifolium. Red clover, 854

Trifolium. Subterranean clover, 863

Trifolium. White clover, 3677, 4357

Trigonella, 2630

Rhizoctonia, 3850

Zea. Maize, 3749

See also *Pellicularia*

Rhizopus

Cichorium. Chicory, 7066

Rhizome

Bromus, 4424

Rhodanidogenic glucosides

Brassica, 3634

Rhodes grass, see *Chloris*

Rhopalosiphum

Malus. Apple, 6778

Zea. Maize, 6116

Rhynchosporium

Hordeum. Barley, 5486, 6280

Ribes

Breeding, 2951

Harvesting, 4850

Hybridization, interspecific, 2950, 4860-1

Polyploidy, 4860-1

Varieties, 2950

Viruses, 5757

Ribes. Black currant

Dasyneura, 3106

γ rays, 4985

Genetics, 4988

Heterosis, 4852

Hybridization, 1339

Hybridization, interspecific, 5787

Inbreeding, 2950

Mutation, induced, 2947, 4985

Neutrons, 4985

Phytoptus, 3682, 6772

Pollination, 6891

Quality, for canning, 4877

Quality, of edible product, 3641, 4986-7

Sphaerotheca, 2941, 4988

Sterility, self, 4852

Synanthedon, 6890

Temperature, effect of, 3107

Varieties, 2950, 3105, 6890

Variety trials, 4982-4

Viruses, 5787

Ribes. Gooseberry

Cuttings, 4989

Growth period, 3109

Hybridization, interspecific, 5920, 6772

Pseudopeziza, 6772

Ribes. Gooseberry—continued

Sphaerotheca, 5788, 5920, 6772

Sterility, fertility, 3109, 4874

Varieties, 3108

Ribes. Red currant

Quality, of edible product, 3641, 4877

Varieties, 6889

Variety trials, 1338

Riboflavine

Candida, 1711

Torula, 3455

Ribonuclease

Zea. Maize, 6160

Rice, see *Oryza*

Ricinus. Castor oil plant

Biochemistry, 2924, 6742

Breeding, 6741

Empoasca, 2922-4, 6743

Flower, 6741

γ rays, 6738

Genetics, 1200, 2921

Height, 6739

Heterosis, 1201

Mutation, induced, 4796, 6738-9

Mutation, somatic, 30

Neutrons, 6739

Pollination, 1203

Seed production, 2921

Sex, 30, 2921, 4796, 6741

Varieties, 1202, 1899, 6740

Variety trials, 4794-5

Water balance, 2923

Root

Beta. Sugar beet, 6637

Brassica. Rape, 6735

Crop plants, 2099

Cynodon, 6378

Medicago, 229, 831, 2028, 4471

Prunus. Almond, 3049

Prunus. Peach, 3049

Prunus. Plum, 1276

Raphanus. Radish, 1504

Triticum. Wheat, 400, 3958

Zea. Maize, 529, 566

See also grafting

Roselle, see *Hibiscus*

Rotenoids

Tephrosia, 6770

Rotylenchulus

Ipomoea. Sweet potato, 952

Rubber, see *Hevea* and latex

Rubus

Apomixis, 1334

Hybridization, interspecific, 2950, 4852

Inbreeding, 5538

Variety trials, 6774

Rubus. Blackberry

Genetics, 4981

Hybridization, interspecific, 1336, 6888

Kuehneola, 2007

Polyploidy, 3104

Spines, 4981

Taxonomy, 3104

Rubus. Dewberry

Apomixis, 1337

Fertilization, sexual, 1337

Rubus. Raspberry

Amphorophora, 218, 3103, 3686, 6772

Breeding, 3102

Byturus, 2941

Cold resistance, 1973

Colour, 3101, 6887

Didymella, 4980

Fruit, 3101

Genetics, 3103, 6772, 6887

Rubus. Raspberry—continued

- Hybridization, interspecific, 2941, 4842, 4980, 5538, 6888
- Pathology, 1335
- Quality, for freezing, 2959
- Sphaerotheca*, 2941
- Statistics genetics, 3101
- Varieties, 1335, 1962, 2002, 4979
- Variety trials, 3100, 5511

Rumex. Sorrel

- History and evolution, 5159
- Hybridization, interspecific, 5159, 7056
- Meiosis, 5159
- Polyploidy, 3501, 7056
- Radiation, 3501
- Sex chromosomes, 5159

Rutabaga, *see* *Brassica*

Rye, *see* *Secale*

Ryegrass, *see* *Lolium*

SACCHAROMYCES

- Aneuploidy, 5339
- Biochemistry, 1722, 1731, 3440, 5341, 5345, 7219–21, 7223
- Biotypes, 5338
- 5-Bromouracil, 1721
- Cadmium, 1731
- Cell division, 3547, 7214
- Chemicals, effect of, 1720–21, 1731–2, 3453, 5333, 5336, 5339, 7222, 7228
- Chromosome aberrations, 1724–7, 3435–6
- Complementation, 3442, 7218
- Copper, 1732
- Cycloheximide, 7220
- Cytoplasmic inheritance 1722, 3449, 5344
- Dimethylhydrazine, 7215
- Enzymes, 1730, 3438, 7217
- γ rays, 1724–7
- Gene conversion, 1717
- Genetics, 1707, 3428, 3437–41, 5344, 7217
- Haploidy, 5342
- Heterozygosis, 5340
- Inhibitors, 1715, 1719
- Interference, 22
- Lethals, 23
- Linkage, 1715, 3499, 5332
- Meiosis, 22, 3450, 3499
- Melezitase, 12
- Mitochondria, 1722, 3449
- Mitotic recombination, 1716, 5333, 7215
- Molecular genetics, 3508, 7216–7, 7221
- Multiple alleles, 3518
- Mutation, 1722, 7219–20
- Mutation, induced, 89, 1718–21, 1730, 3436, 3443–5, 3453, 5333–7, 7221–3, 7226, 7228–9
- Mutation somatic, 1722, 3446–7
- 1-Nitroso-imidazolidone-2, 3453
- 1-Nitroso-3-nitro-1-methylguanidine, 5336
- Nucleic acids, 1722
- Phosphorus, 1731
- Physiological races, 1723, 3448
- Physiology, 3441
- Polyploidy, 89, 1728, 5340–2
- Quality for fermentation, 1723, 1728, 3139, 3451–2, 5343, 7224–5, 7227
- Radiation, 89, 1713, 5334
- Radioactive isotopes, 1718
- Respiration, 1730, 3446–7, 5344, 7228
- Segregation, 3500, 3518
- Serology, 5346
- Sex, 1729
- Sterility, fertility, 1707
- Sterols, 5345
- Taxonomy, 5346, 7225
- Temperature, effect of, 3445, 5338

Saccharomyces—continued

- Ultraviolet rays, 1719, 5337
- X rays, 23, 3435–6, 3443–4, 3499–500, 5342, 7214
- Saccharum*. Sugar cane
 - Aceria*, 2852
 - Aulacaspis*, 1065
 - Breeding, 226, 1061, 1957, 2815, 2824, 2835, 2838, 4693–4, 4697–8, 6594, 6596–7, 6599–601
 - Cell division, 2829
 - Chilotraea*, 1069, 6618–9
 - Chromosome morphology, 2831
 - Chromosome number, 1066, 1947, 2830–1, 4701–2
 - Cold, effect of, 1067
 - Cold resistance, 2848, 4704, 6614
 - Development, 4703
 - Diatraea*, 4707
 - Endomitosis, 4701
 - Enzymes, 6612
 - γ rays, 4705
 - Genetics, 3764, 4703, 6602
 - Germination, 1067, 5522
 - Glomerella*, 4705
 - Growth period, 4700
 - Helminthosporium*, 2851
 - History and evolution, 4701, 6601
 - Hybridization, 1068, 2826, 4701
 - Hybridization, intergeneric, 1056, 2820, 2830–1, 4700
 - Hybridization, interspecific, 2821–2
 - Leaf, 6602
 - Ligule, 4702
 - Matrocliny, 6603
 - Meiosis, 2830
 - Mutation, induced, 4705
 - Nematodes, 1058
 - Nitrogen, 2814
 - Pathology, 4695, 6613
 - Pellicularia*, 2850
 - Physoleptera*, 1910, 2849
 - Pollination, 2831
 - Polyploidy, 2831
 - Puccinia*, 1902, 6616
 - Quality, of edible product, 4695
 - Quantitative characters, 1068, 2824
 - Seed production
 - Selection, artificial, 2816–9, 2823
 - Selection, natural, 6604
 - Statistics, experimental designs, 1054
 - Sterility, fertility, 2815, 4696
 - Sterols, 2828
 - Sucrose, 6612
 - Taxonomy, 2830
 - Toxic soils, 2847
 - Ustilago*, 225, 1056, 1902, 4692, 4706, 6615, 6617
 - Variation, 2825
 - Varieties, 1058, 1065, 1950, 1960, 2097, 2839–46, 4474, 4692, 4696, 6601, 6605–11
 - Variety trials, 1055, 1057, 1059–60, 1062–4, 2832–4, 2836–7, 2854, 4691, 6595–6, 6598, 6600, 6615
 - Viruses, 1058–9, 2853–4, 3764, 4692, 4708
 - Water, effect of, 6619
 - Waterlogging, 1056, 2827
 - Xanthomonas*, 1058–9, 1065, 1960, 3752, 4698
 - Yield, 1068
- Safflower, *see* *Carthamus*
- Sainfoin, *see* *Onobrychis*
- Salinity, *see* toxic soils
- Salix*. Willow
 - Anatomy, 5087
 - Breeding, 6952
 - Cold resistance, 6952
 - Flower, 3224
 - Habit, 1465
 - History and evolution, 3224, 5087
 - Hybridization, interspecific, 1465

Salix. Willow—continued

- Leaf, 5087
- Quality, of timber, 3212
- Sambucus*. Elder
- Chromosome morphology, 3113
- Varieties, 220

Saperda

- Populus*. Poplar, 5072

Sapogenin

- Dioscorea*. Yam, 1123, 4742

Saponin

- Medicago*, 4369

Sappaphis

- Malus*. Apple, 6777–8

Sarcosine, 128

Sarson, see *Brassica*

Saskatoon, see *Amelanchier*

Satureja. Savory

- Plant collections, 5156

Savory, see *Satureja*

Schizaphis

- Triticum*. Wheat, 455

Schizosaccharomyces

- Genetics, 1707, 5349
- Hydroxylamine, 3454
- Inhibitors, 1775
- Mutation, back, 1733
- Mutation, induced, 1733–4, 3454, 3566–7, 5347, 5349
- Mutation, spontaneous, 1734
- Quality, for fermentation, 5343, 5348
- Selection, artificial, 1734

Sciapteron

- Populus*. Poplar, 5072

Scion, see grafting

Sclerenchyma

- Thea*. Tea, 1158

Scleroderris

- Pinus*. Pine, 7001

Sclerospora

- Pennisetum*, for grain, 3747
- Sorghum*, for grain, 2472–3, 3747

Sclerotinia

- Agrostis*, 4421
- Beta*. Sugar beet, 5795–7, 5800–1
- Cichorium*. Chicory, 3701
- Fragaria*. Strawberry, 1346, 1357, 3684, 5789, 6906
- Fruit crops, 5780
- Glycine*. Soya bean, 3407
- Helianthus*. Sunflower, 5865
- Lactuca*. Lettuce, 1540
- Lupinus*. Lupin, 5629
- Malus*. Apple, 6815
- Physiological races, 5253
- Prunus*. Almond, 3080
- Trifolium*. Red clover, 198, 3848, 5486
- Trifolium*. White clover, 6454
- Vicia*. Broad bean, 5253
- Vitis*, 1390–1, 5753, 5922

Sclerotium, see *Macrospora*, *Leptosphaeria* and *Pelli-cularia*

Scolecotrichum

- Dactylis*, 6375

Scopolamine

- Atropa*, 4819

Scorzonera

- Breeding, 2939

Seakale, see *Crambe*

Secale. Rye

- Amphidiploidy, 348, 2183
- Aneuploidy, 2297, 4084–5, 6109
- Anthocyanin, 1754
- Apomixis, 6022
- Biotypes, 5595
- Breeding, 195, 488, 2300, 3898, 4078, 5938, 5986–7
- Caryopsis, 4092

Secale. Rye—continued

- Cell division, 156, 2298, 6110
- Cercospora*, 2148
- Chlorophyll, 1754
- Chromosome aberrations, 346, 4081, 5988
- Chromosome bridges, 2299
- Colchicine, 270
- Cold resistance, 488
- Colour, 4080, 4092
- Combining ability, 200, 2296
- Crossing over, 1815, 3679
- Dormancy, 195
- Enzymes, 4091
- Erysiphe*, 5648
- γ rays, 156, 2299
- Genetics, 485, 3684, 4080, 4082, 6112
- Genome analysis, 4043
- Geography, 6109
- Germination, 4091
- Growth period, 2137, 3896
- Heat, drought resistance, 6057
- Herbicides, 6114
- Heterosis, 2295–6, 4088, 6108
- Heterozygosis, 1815
- History and evolution, 6022
- Hormones, 6111
- Hybridization, 484, 2004, 4090, 6113
- Hybridization, graft, 3947
- Hybridization, intergeneric, 248, 344–8, 2178–9, 3937–41, 4043, 4082, 5648, 5986–9, 6022, 6247
- Hybridization, interspecific, 3679, 3684, 4081
- Inbreeding, 483
- Lodging, 1754, 4093, 6113
- Meiosis, 1815, 3645, 3938, 4085
- Micurinism, 345, 6108
- Mixtures of crops or genotypes, 487
- Mutation, induced, 1754
- Nucleic acids, 6110
- Nucleolus, 348
- Nutrients, 6108
- Perennial habit, 3684, 4081
- Phenols, 483, 485
- Pollination, 2004, 4089
- Polyploidy, 247–8, 270, 484, 2084, 2299, 3484, 3645, 3665, 4086–90, 5470, 5648, 5938, 5940, 5989, 6110–1
- Pratylenchus*, 3753
- Protein, 2100
- Puccinia*, 3941, 4082, 5648, 5959
- Quality, for milling and baking, 2300, 3940, 4092
- Quality, nutritive value, 486
- Radiation, 2084
- Segregation, 5595
- Sterility, fertility, 484, 4090
- Sterility, self, 6112
- Varieties, 1875, 2131–2, 4083, 5487, 5490
- Variety trials, 203, 263, 481–2, 2294, 4077–9, 5939, 5959
- Vernalization, 2298
- X rays, 1754
- Yield, 2141, 5989

Seed

- Allium*. Onion, 5128
- Arachis*. Groundnut, 1959, 3081
- Beta*. Sugar beet, 1115–6
- Brassica*, 7039
- Brassica*. Rape, 1198
- Canarium*, 4977
- Capsicum*, 2911
- Carthamus*. Safflower, 1220
- Coffea*. Coffee, 2893
- Cucumis*. Melon, 2075
- Cucurbita*, 1551
- Glycine*. Soya bean, 1655, 1670, 3397, 3408
- Gossypium*. Cotton, 975, 993, 1014, 1027, 1922, 1924, 1933, 1946, 2066, 2777–8
- Helianthus*. Sunflower, 1212, 1215

Seed—continued

- Lespedeza*, 3762, 4530
Lolium, 4362
Medicago, 1994, 4484
Nicotiana, Tobacco, 1137
Phaseolus, 1622
Pinus, Pine, 5098
Pisum, Pea, 1968, 3412, 3417–8, 7193
Trifolium, Red clover, 4513
Vicia, Broad bean, 5251–2
Vicia, Vetch, 2652
Zea, Maize, 2371, 6195
 See also caryopsis

Seed production

- Allium*, Onion, 1512
Beta, Sugar beet, 1890, 4733
Brassica, Cauliflower, 7053
Carica, Papaya, 1333
 Crop plants, 255, 2102–3
Cucumis, Cucumber, 3299, 7089
Fagopyrum, Buckwheat, 6086
Gossypium, Cotton, 2784
 Grasses, 2563–4, 4384, 4415
Hordeum, Barley, 2421
 Leguminous forage crops, 2610
Lolium, 782, 1867, 2571
Lycopersicon, Tomato, 3299
Medicago, 4503
Nicotiana, Tobacco, 1145, 4746
Pinus, Pine, 5090
Ricinus, Castor oil plant, 2921
Solanum, Potato, 930, 4579
Sorghum, for grain, 2463
Trifolium, 4384
Trifolium, Red clover, 852, 2640, 4515
Triticum, Wheat, 2171, 2242
Zea, Maize, 2329–30, 4144–5, 6145–7, 6151

Seed storage

- Lactuca*, Lettuce, 5160
Pinus, Pine, 5094
Zea, Maize, 2383

Seed testing

- Beta*, Sugar beet, 6638
 Grasses, 2561

Seedlings

- Abies*, Fir, 3234
Beta, Sugar beet, 1085
 Crop plants, 2099
Medicago, 4497–8
Onobrychis, Sainfoin, 1980
Triticum, Wheat, 1987
Zea, Maize, 4188

Segregation, 5, 1776, 1784, 3532, 3551–4, 3564–5

- Agropyron*, 2037
Avena, Oats, 472
Citrus, Orange, 4942
Gossypium, Cotton, 6551
Helianthus, Sunflower, 4807
Hordeum, Barley, 649, 4217, 5486
Ipomoea, Sweet potato, 6535
Lycopersicon, Tomato, 29, 5210
Pisum, Pea, 1679–80, 1683
Poncirus, 4942
Puccinia, 1708, 5858
Saccharomyces, 3500, 3518
Secale, Rye, 5595
Solanum, Potato, 4553
Triticum, Wheat, 2037, 2233, 3919, 6028, 6035
Ustilago, 1708, 5372
Vitis, 5011, 5748
Zea, Maize, 4159, 4196, 6175
 See also mitotic recombination
 Selection, artificial, 18, 48, 148–9, 3555, 3588, 3654, 3686, 5451, 5565
Agaricus, 1736, 5351

Selection, artificial—continued

- Apium*, Celery, 7064
Avena, Oats, 467
Beta, Sugar beet, 4731, 5796, 6627
Brassica, Brussels sprouts, 5155
Brassica, Cabbage, 5146
Cocos, Coconut, 1319
 Crop plants, 2089–90, 4351, 4363
Digitalis, 6763
Elaeis, Oil palm, 2936
Eleusine, 6304
 Forest trees, 1440
Glycine, Soya bean, 1648–9, 5292, 7164
Gossypium, Cotton, 1000, 5820, 5834–5
 Grasses, 4352
Hordeum, Barley, 2420, 4212, 6254
Humulus, Hop, 1183, 4783, 5870
Lactuca, Lettuce, 7061
Linum, Flax, 1031
Lolium, 3643, 5438, 6390
Lycopersicon, Tomato, 2943, 5712
Medicago, 2628
 Microorganisms, 3430
Nicotiana, Tobacco, 2874, 3589, 5815, 6682
Oryza, Rice, 4305, 6334
Persea, Avocado, 1448
Phalaris, 4354
Phaseolus, 1625
Pinus, Pine, 38, 1469, 3229
Pyrus, Pear, 6822
Saccharum, Sugar cane, 2816–9, 2823
Schizosaccharomyces, 1734
Solanum, Potato, 2717, 2723, 6498
Theobroma, Cacao, 1171
Trifolium, Red clover, 2639, 3643, 4514, 6445
Triticum, Wheat, 400, 2194–5
Vicia, Broad bean, 3364
Zea, Maize, 516, 541, 1973, 2354–7, 4158–60, 6162, 6200

Selection, natural, 82, 3735, 5401–2, 5406–7

- Agrostis*, 6376
Avena, Oats, 473–4
 Crop plants, 2108
 Grasses, 2555
Hordeum, Barley, 1798
Lotus, Birdsfoot trefoil, 3679
Oryza, Rice, 715, 4304
Phaseolus, Lima bean, 1798
Saccharum, Sugar cane, 6604
Trifolium, 4508
Trifolium, White clover, 5578
Triticum, Wheat, 2194–5

Self sterility, see sterility, self

Sepal, see flower

Septoria

- Apocynum*, 5913
Lycopersicon, Tomato, 1587
Triticum, Wheat, 225, 452
 see also *Leptosphaeria* and *Mycosphaerella*

Serology, 5429

- Agropyron*, 2608
Brassica, Kale, 3503
Glycine, Soya bean, 3405
Medicago, 2632
Phaseolus, 127, 1624, 3626, 5426, 7144
Saccharomyces, 5346
Solanum, Potato, 2723, 5705
Vitis, 5037

Sesame, see Sesamum

- Sesamum*, Sesame
 Mutation, induced, 1858
 Plant collections, 6746
 Pollen, 6745
 Quantitative characters, 2925
 Varieties, 1204, 1893, 6744

Sesamum. Sesame—continued

X rays, 1858

Yield, 2925

Setaria

Cold resistance, 4409

Genetics, 6288

Plant collections, 4409

Polyploidy, 229, 2029

Quality, nutritive value, 1835

Sterility, self, 2029

Variation, 6287–8

Variety trials, 2554, 6286

Sex, 177, 3466

Actinidia, 3095

Asparagus, 1236, 3700

Cannabis. Hemp, 2799–801, 3822, 4678, 5478

Ceratocystis, 5931

Crop plants, 249, 1805, 5877

Cucumis. Cucumber, 3320–4, 3822, 5182–3, 5594, 7086–7

Cucumis. Melon, 3305, 3822, 7072

Daucus. Carrot, 7023

Dioscorea. Yam, 1122

Elaeis. Oil palm, 3798

Fragaria. Strawberry, 6895

Humulus. Hop, 2901

Lagenaria, 7084

Luffa, 1896

Mangifera. Mango, 6864

Morus. Mulberry, 1293

Populus. Poplar, 6956

Ricinus. Castor oil plant, 30, 2921, 4796, 6741

Saccharomyces, 1729

Spinacia. Spinach, 3633, 3822

Swietenia, 5081

Triticum. Wheat, 2189

Ustilago, 6617

Vitis, 1374, 2004, 3168

Zea. Maize, 4138, 4179

Sex chromosomes

Asparagus, 1517, 3684

Carica. Papaya, 1752

Humulus. Hop, 1752, 1808

Myristica. Nutmeg, 4784

Rumex. Sorrel, 5159

Spinacia. Spinach, 1808, 3289

Vitis, 1752

Shaddock, *see Citrus*

Shallot, *see Allium*

Shattering, *see* Shedding

Shedding

Brassica. Rape, 5506

Glycine. Soya bean, 3396

Lupinus. Lupin, 4398

Oryza. Rice, 4312

Vicia. Broad bean, 7134

Vitis, 1376

Shellbark

Citrus. Lemon, 3064

Silicon

Oryza. Rice, 2534, 4291

Sinapis *see Brassica*

Sisal, *see Agave*

Sitania

Hybridization, intergeneric, 6411

Sitona

Melilotus. Sweet clover, 1968

Pisum. Pea, 5735

Sitophilus

Sorghum, for grain, 1897

Zea. Maize, 2390, 4195

Sitotroga

Zea. Maize, 5713

Size

Brassica. Kale, 1527

Cucumis. Cucumber, 5178

Fragaria. Strawberry, 6896–7

Lycopersicon. Tomato, 7100

Malus. Apple, 4885, 4888

Nicotiana. Tobacco, 6672

Pisum. Pea, 7193

Vicia. Broad bean, 5252

Smoking quality, *see* quality

Sodium

Grasses, 753, 755

Soil nutrients, *see* nutrients

Soil pH

Cereals, 2139

Zea. Maize, 6203

Soja, *see Glycine*

Solanum. Egg plant, 2951

Colour, 7126

Embryology, 7129

Flower, 7128

Fruit, 3771

Genetics, 3771, 5225

Growth period, 7128

Heterosis, 3331, 5235

History and evolution, 5236

Hybrid varieties, 1498

Hybridization, 3246, 3635

Hybridization, graft, 7127

Linkage, 7126

Meloidogyne, 5237

Pseudomonas, 5225

Quality, of edible product, 5236

Varieties, 1598, 3253–4

Verticillium, 1238, 5716

Solanum, for fruit

Chromosome number, 3356

Polyploidy, 3357

Quality, of edible product, 7125

Taxonomy, 3358

Solanum. Potato, 5359

Aesculin, 2943

Alternaria, 2713

Aminoacids, 6524

Bacteria, 6521

Biochemistry, 5625, 5703, 6529

Botryodiplodia, 2668

Breeding, 186–7, 195, 213, 884, 894, 900, 919, 1972, 2667–8, 2672, 2679, 2722, 4570–1, 4583, 4595–6, 5925, 6489–90, 6512

Caffeic acid, 5625

Chimeras, 905

Chlorogenic acid, 936, 941

Chromosome aberrations, 903

Colchicine, 2696

Cold resistance, 886, 2668–9, 2685, 2713–4

Colour, 2943, 6493

Corynebacterium, 2713, 5867

Cytology, 2701

Cytoplasmic inheritance, 6497

2,4-D, 946

Defoliation, 3845

Development, 916, 5926

Dihydrogen phosphate, 4588

Dormancy, 919, 2686

Empoasca, 892

Enzymes, 6528

Epitrex, 892

Ervinia, 4584

Esterase, 928

Ethyl methanesulphonate, 904

Fungi, 890

γ rays, 27, 2072–3

Genetics, 200, 932–5, 1862, 2680–1, 2943, 4600, 4601, 5690, 5895, 6493–4

Solanum. Potato—continued
 Genome analysis, 2943
 Grafting, 4573
 Growth period, 917–8, 2673, 4571, 6494, 6511–2
 Haploidy, 200, 895, 2676, 2683, 2696, 2698–9
 Heat, drought resistance, 2669, 2714, 6520
 Herbicides, 4608
Heterodera, 200, 915, 942, 2713–4, 3700, 4592–600, 5486, 5934, 6527–9
 History and evolution, 926–7, 2695, 4556, 4569, 5600, 6506–8
 Hybridization, 2682, 4551, 4554, 4579, 5689, 6492, 6495–6
 Hybridization, graft, 3585
 Hybridization, intergeneric, 7104
 Hybridization, interspecific, 200, 886, 895, 897–9, 902, 1841, 2669, 2683–5, 2701, 2713, 2943, 3686, 4555–8, 4597–8, 5693–4, 5700, 5934, 6497, 6523
 Hydrocarbons, 2706
Hypomyces, 885, 889, 940, 2711
 Inbreeding, 2676, 3700
 Insecticides, 2724
 Irrigation, 2709, 4582
Leptinotarsa, 4601, 6530
 Linkage, 2686
Macrophomina, 2714
 Malvidin, 2943
Meloidogyne, 4595
 Mixtures of crops or genotypes, 2710, 6491
 Mutation, 2686
 Mutation, induced, 200, 903, 2041, 2072–4, 2669
 Mutation, somatic, 904
 Nucleic acids, 6497
 Pathology, 2015, 2106, 2668–9, 2684, 2711–4, 3700, 4551, 4583, 5689, 5693, 5709, 5898, 6494, 6519
Pellicularia, 2713
 Phenols, 936
 Phosphorus, 4588
Phytophthora, 213, 899–900, 933–7, 1862, 1960, 2674, 2715–8, 3682, 4585–8, 5625, 5689–700, 5845, 5866, 5894–5, 5897, 5926, 5929, 6505, 6521–5
 Plant collections, 929, 2707, 3465, 4576–8
 Pollen, 891
 Pollination, 4572
 Polyhaploidy, 2700
 Polyphenoloxidase, 6515
 Polyploidy, 898–9, 2696–7, 2943, 4551, 4557, 4570, 4578, 6496, 6509–10
 Protein, 2702, 2704, 4575
Pseudomonas, 2713
 Quality, for cooking, 923, 6515–6
 Quality, for storage, 6516
 Quality, nutritive value, 2685, 2703, 6514, 6519
 Quality, of edible product, 891, 921–2, 2681, 4568, 6494
 Radiation, 903, 2074
 Reproduction, 2701
 Seed production, 930, 4579
 Segregation, 4553
 Selection, artificial, 2717, 2723, 6498
 Serology, 2723, 5705
Spongospora, 4589
 Starch, 924, 4571, 4575, 4581, 6512, 6517–8
 Statistics, experimental designs, 6491
 Sterility, fertility, 2673, 4557
Streptomyces, 887, 889, 2015, 2673, 2675, 2711, 2713, 5896, 6522
 Sugars, 4574
Synchytrium, 200, 938–9, 2668–9, 2713, 2719, 3682, 3700, 4590, 5701–4
 Tannin, 5696
 Taxonomy, 902, 925–9, 2705–6, 4576
Tetranychus, 5710
 Tissue culture, 946
 Tuber, 920, 4587
 Varieties, 893, 906–15, 1960, 2093, 2687–94, 4559–68, 5361, 5486, 5536, 5698, 6499–505, 7239

Solanum. Potato—continued
 Variety trials, 882–3, 896, 946, 1887, 1955, 1969, 2670–1, 2677–8, 2712, 4549–50, 4552, 4577, 4582, 4594, 6475, 6484–8
 Vein necrosis, 932
Verticillium, 887, 889, 901, 941, 2673, 4591, 5534, 6536
 Viruses, 888, 939, 943–5, 2674, 2713, 2720–3, 3659, 3686, 3752, 4602–7, 5456, 5705–8, 5896, 6531–4
 Water balance, 2686
 X rays, 904, 6493
 Yield, 901, 918, 931, 2679, 2708, 2724, 4580–1
Solanum, see also *Lycopersicon*
 Somatic chromosome association
Triticum. Wheat, 2213
 Somatic recombination, see mitotic recombination
 Somatic reduction
Allium, 5134
 Somatic segregation, see mitotic recombination
Sorghastrum
 Varieties, 2588
Sorghum
 Aneuploidy, 4272, 4275
Atherigona, 666, 694
 Atrazine, 695
 Birds, 693, 2007, 3788, 4283
 Breeding, 206, 213, 663, 666, 693, 2119, 2122, 2134, 2441, 2454–6, 2590, 4261–2, 4280, 6306
 β -carotene, 3624, 5464
 Caryopsis, 686, 4279
 Chimeras, 6316
 Chromosome aberrations, 695
Claviceps, 2474
 Colchicine, 681
 Combining ability, 676–7, 1916, 4270, 6315
 Competition, 689
 Cyanogenetic compounds, 4281
 Cytology, 6314
 Development, 682
 2,4-Dichloroisobutyrate, sodium, 2468
Erwinia, 5679
 Ethyl methanesulphonate, 680
 Flower, 2467
 Fungi, 692
 Genetics, 667, 683, 686, 1900, 2473, 3624, 3747, 4278–9, 5464, 5530, 6320
 Geographical races, 1846
 Growth period, 683, 4277–8
 Heat, effect of, 6310
 Height, 689, 2471, 4394
 Herbicides, 6373
 Heterosis, 1916, 4268, 4385, 4441, 6312–3, 6315
 Hybrid varieties, 668–74, 1837, 1899, 2460–3, 4263–7, 6311
 Hybridization, 675, 1897, 1915, 2029, 2459, 6310
 Hybridization, interspecific, 678, 1070, 2005, 4276, 4281, 4394, 4442, 6314, 6319
 Inbreeding, 4271, 6313
 Linkage, 679
 Lodging, 690
 Meiosis, 1070, 2466, 4276
 Methyl methanesulphonate, 680
 Mutation, induced, 679–81
 Mutation, spontaneous, 2592
 Pathology, 4282
 Photoperiodism, 4284
 Plant collections, 2442, 2473, 2475, 6321
 Pollination, 684
 Polyploidy, 678, 681, 4276, 6319
 Protein, 2462
Pseudomonas, 691, 4282
 Quality, for milling and baking, 2470
 Quality, nutritive value, 281, 674, 1835, 2469, 2594
 Quantitative characters, 1846, 2459, 4270, 4441
Ramulispora, 2475
Sclerospora, 2472–3, 3747

- Sorghum*—continued
 Seed production, 2463
 Sowing, 687
 Sterility, male, 685, 1915, 2466–8, 2474, 2592, 3747, 4265–7, 4271, 5530, 6320
Striga, 666
 Taxonomy, 6314
 Toxic soils, 285, 682
 Translocation, 679
Tribolium, 6322
Trichometasphaeria, 4282
 Variation, 2462
 Varieties, 244, 801, 1897, 1956, 2121, 2133, 2465, 4273–4, 4280, 4442–3, 5522, 6317–8, 6401
 Variety trials, 664–5, 670–3, 802–3, 1887, 1895, 1950, 1955, 2119, 2441, 2453, 2457–8, 2462, 2589, 2591, 3779, 4264, 4440, 5582, 6307–9, 6311, 6403
 Viruses, 3661
Xanthomonas, 4282
 Yield, 675, 688, 2462, 2471, 4268
Sorghum, for sugar
 Glucosides, 4456
 Growth period, 4700
 Hybridization, intergeneric, 4700
 Hybridization, interspecific, 1070–1
 Meiosis, 1070–1
 Polyploidy, 1070–1
 Sugar, 229
 Varieties, 3779
 Sorgo, *see Sorghum*
Sorosporium
 Zea. Maize, 5500
 Sorrel, *see Rumex*
 Sound waves
 Vicia. Broad bean, 3603
 Southern pea, *see Vigna*
 Sowing
 Avena. Oats, 4064
 Brassica. Rape, 1199
 Cannabis. Hemp, 6587
 Crop plants, 5482
 Hordeum. Barley, 2431, 3896, 6262
 Linum. Linseed, 4800
 Lupinus. Lupin, 877
 Lycopersicon. Tomato, 5196
 Sorghum, 687
 Triticum. Wheat, 419, 3966, 4009
 Zea. Maize, 582
 Soya bean, *see Glycine*
Spartina
 History and evolution, 4448
 Hybridization, interspecific, 4448
 Polyploidy, 4448
Sphacelotheca
 Zea. Maize, 6212
Sphaeropsis
 Fragaria. Strawberry, 1346
 Malus. Apple, 2999, 5758, 5765
 Ribes. Black currant, 2941, 4988
 Ribes. Gooseberry, 6772
 Rubus. Raspberry, 2941
Sphaerotheca
 Humulus. Hop, 1182
 Ribes. Gooseberry, 5788, 5920, 6772
 Spikelet, *see flower*
Spilocaea
 Olea. Olive, 4976
 Spinach, *see Spinacia*
 Spinach beet, *see Beta*
Spinacia. Spinach
 Growth period, 7055
 Heterosis, 3331
 Hybrid varieties, 221, 1236, 1535
 Iron, 5158
 Photoperiodism, 7055
Spinacia. Spinach—continued
 Polyploidy, 5158
 Protein, 3633
 Sex, 3633, 3822
 Sex chromosomes, 1808, 3289
 Translocation, 3289
 Varieties, 2091–2, 3684
 Variety trials, 1494, 5157
 Spines
 Malus. Apple, 4892
 Rubus. Blackberry, 4981
Spongospora
 Solanum. Potato, 4589
 Sports, *see mutation*
 Spring habit, *see growth period*
 Sprouting, *see germination*
 Sprouting broccoli, *see Brassica*
 Spruce, *see Picea*
 Squash, *see Cucurbita*
 Squirrel tail, *see Hordeum and Sitanion*
Stagonospora, *see Leptosphaeria*
 Stamen, *see flower*
 Starch
 Oryza. Rice, 4293
 Solanum. Potato, 924, 4571, 4575, 4581, 6512, 6517–
 Triticum. Wheat, 417
 Zea. Maize, 574
 Statistics, 5353, 7230
 Crop plants, 2034
 Statistics, biometry, 35, 3544
 Glycine. Soya bean, 3390
 Nicotiana. Tobacco, 1127, 1793–4
 Oryza. Rice, 6350, 6359–60
 Populus. Poplar, 3217
 Zea. Maize, 491
 Statistics, cytology, 3546, 3605, 5375
 Lolium, 3594
 Statistics, experimental designs, 1758
 Cereals, 2127, 3875
 Crop plants, 3809
 Hordeum. Barley, 2128
 Lycopersicon. Tomato, 1564
 Pisum. Pea, 3473
 Saccharum. Sugar cane, 1054
 Solanum. Potato, 6491
 Triticum. Wheat, 2128
 Zea. Maize, 2346
 Statistics, genetics, 34, 148, 1762–5, 1768, 1778, 1799, 3577, 3653, 5367, 5378, 5407, 5450, 7233
 Brassica. Rape, 2916
 Crop plants, 3651, 3808, 5447–8
 Dactylis, 4420
 Forest trees, 1436
 Hordeum. Barley, 608, 2439
 Nicotiana. Tobacco, 1793–4, 3589
 Pinus. Pine, 3229
 Rubus. Raspberry, 3101
 Triticum. Wheat, 1767
 Zea. Maize, 4165, 6149
 Stem
 Brassica. Kale, 1527
 Cannabis. Hemp, 5840
 Cucumis. Cucumber, 5183
 Gossypium. Cotton, 998, 2068, 2753, 6551
 Hordeum. Barley, 5958
 Humulus. Hop, 4783
 Pisum. Pea, 5306
 Populus. Poplar, 6966
 Triticum. Wheat, 2191, 2226, 2250, 5958, 5979
 Zea. Maize, 4179
Stemphylium
 Lupinus. Lupin, 2004
 Sterility, female
 Gossypium. Cotton, 4648
 Hordeum. Barley, 5534

Sterility, female—continued

Oryza. Rice, 2533
Vaccinium, 3111
 Sterility, fertility, 178, 1799, 3541, 3548, 3615, 3736, 5429
Agropyron, 349, 1986, 5535, 6412
Arrhenatherum, 2583
Brassica, 5141, 5446
Brassica. Cabbage, 7046
Brassica. Kale, 3503, 5486
Brassica. Swede, 6481
Bromus, 1757
Capsicum, 4826
Carica. Papaya, 1333
Carthamus. Safflower, 4812
Ceratocystis, 5930
Cichorium. Chicory, 7065
Cichorium. Endive, 3298
Citrullus. Water melon, 1547
Citrus, 3059, 6852
Corylus. Hazel, 3077
Cucumis. Cucumber, 7089
Cydonia. Quince, 6829
Cynodon, 769
Dioscorea. Yam, 1123
Echinochloa, 2451
Erysiphe, 5960
Euchlaena, 1937
Festuca, 3787
Fragaria. Strawberry, 4874, 5534
Glycine. Soya bean, 1654, 3396
Gossypium. Cotton, 992, 4643-4, 6554
Helianthus. Jerusalem artichoke, 2928
Helianthus. Sunflower, 1208, 2928
Hordeum. Barley, 1964, 4224
Indigofera, 4541
Ipomoea. Sweet potato, 949, 4611, 6537
Juniperus, 3226
Larix. Larch, 5111
Lotium, 3787
Lotus. Birdfoot trefoil, 879
Lupinus. Lupin, 874
Lycopersicon. Tomato, 5206, 7101
Malus. Apple, 4891
Medicago, 830, 2622-3, 4377, 6430
Musa. Banana, 5005
Nicotiana. Tobacco, 3519, 6674, 6686
Oryza. Rice, 21, 731, 2478, 2503, 2505, 3722, 4314, 4317, 4323, 6328, 6331, 6333, 6349
Oxycoccus. Cranberry, 6908
Paspalum, 792
Phaseolus, 3375, 7143
Pisum. Pea, 1675, 5311
Polygonum, 2937
 Pome fruits, 2957
Prunus. Almond, 4959
Prunus. Apricot, 1272, 2957, 6835
Prunus. Cherry, 1280, 4927
Prunus. Plum, 3774
Ribes. Gooseberry, 3109, 4874
Saccharomyces, 1707
Saccharum. Sugar cane, 2815, 4696
Secale. Rye, 484, 4090
Solanum. Potato, 2673, 4557
Thea. Tea, 4761
Theobroma. Cacao, 4773, 4776, 4778
Trifolium. Minor species, 6457
Trifolium. Red clover, 221, 2007, 4361, 4513
Trifolium. Strawberry clover, 6455
Trifolium. White clover, 6453
Triticum. Wheat, 338, 349, 381, 2168, 2176, 2190, 3666, 3705, 3741, 3977, 5471, 6036
Vicia. Broad bean, 3240, 3363
Vitis, 3175-6, 5012, 5023, 6934
Zea. Maize, 518, 559, 564, 1937, 4166

Sterility, male, 1826, 5435

Aegilops, 3926, 3974
Allium. Onion, 1511, 3266
Beta, 200
Beta. Mangel, 198, 6480
Beta. Sugar beet, 1106, 2861-2, 3685, 4714, 4727, 6636
Brassica, 7038
Brassica. Cauliflower, 3284
Brassica. Kale, 5150
Cajanus, 7200
 Cereals, 5948
Citrullus. Water melon, 5171
Cocos. Coconut, 3086
 Crop plants, 235
Cucumis. Cucumber, 1555
 Cucurbits, 2004
Dactylis, 1964, 2567, 5534
Daucus. Carrot, 1964, 2941, 7025
Dichanthium, 4439
Fagopyrum. Buckwheat, 4047
Festuca, 6381, 6396
Fragaria. Strawberry, 3131
Gossypium. Cotton, 2756, 2772-3, 4628
 Grasses, 10, 1964, 5538
Helianthus. Sunflower, 1211, 2931, 3472, 4807
Hevea. Rubber, 4837
Hordeum. Barley, 607, 636, 2407, 2421, 3872, 4237, 6263
Linum. Flax, 1033
Linum. Linseed, 1205
Lolium, 784, 6381, 6396
Lycopersicon. Tomato, 1580, 5191
Malus. Apple, 1246
Medicago, 2625, 4359
Mentha, 5324
Nicotiana. Tobacco, 20, 2873, 2880, 5806, 6650, 6655
Oryza. Rice, 4321
Pennisetum, 2597
Pennisetum, for grain, 1836, 2450, 4393, 6302
Phleum, 1964, 4423
Pisum. Pea, 200
Prunus. Plum, 3022, 3671, 4917, 5476
Sorghum, 685, 1915, 2466-8, 2474, 2592, 3747, 4265-7, 4271, 5530, 6320
Triticum. Wheat, 339, 343, 398-9, 1865, 2050, 2221, 3872, 3925-7, 3961, 3970-4, 5486, 5493, 6037-8, 6039-40
Vaccinium, 1962
Vicia. Broad bean, 5486
Vitis, 1896
Zea. Maize, 501, 560-2, 1749, 1888, 2327, 2344, 2376-7, 3520, 3779, 4123, 4148, 4175-7, 5516, 6151, 6190-2
Zea. Popcorn, 604
 Sterility, self, 1768
Brassica. Cabbage, 7040
Brassica. Kale, 7040
Brassica. Kohl rabi, 7040
Brassica. Sarson, 6733
Brassica. Sprouting broccoli, 7040
Citrus, 3059
 Crop plants, 252
Lotus. Birdfoot trefoil, 880, 2611
Malus. Apple, 2981
Medicago, 1989, 2611, 2624, 4473, 6431
Picea. Spruce, 5088
Raphanus. Radish, 7028
Ribes. Black currant, 4852
Secale. Rye, 6112
Setaria, 2029
Trifolium. Alsike clover, 2644-5
Trifolium. Strawberry clover, 1874
Trifolium. White clover, 2611
Vicia. Broad bean, 1865
 Sterols
Saccharomyces, 5345
Saccharum. Sugar cane, 2828

- Stigma, *see* flower
Stipa
 History and evolution, 808
 Stock, *see* grafting
 Stomata
Hordeum. Barley, 4239
Lycopersicon. Tomato, 3337
 Pome fruits, 4880
Pyrus. Pear, 4909
 Stone fruits
 Bacteria, 1976
 Biochemistry, 6834
 Breeding, 4849, 4854
 Growth period, 4873
 Neutrons, 1976
 Varieties, 6782
 Variety trials, 3013
 Vegetative reproduction, 2958
Verticillium, 5782
 Viruses, 2960, 3015
 X rays, 1976
 Yield, 3014
 Storage quality, *see* quality
 Strawberry, *see* *Fragaria*. Strawberry
 Strawberry clover, *see* *Trifolium*
Streptococcus
 Diacetyl, 5328
 γ rays, 5328
 Mutation, induced, 5328
Streptomyces, 145, 1705-6, 7210-1
 Antibiotics, 1704
 Mutation, induced, 1704, 1706, 7211
 Physiological races, 5328
Solanum. Potato, 887, 889, 2015, 2673, 2675, 2711, 2713, 5896, 6522
 Taxonomy, 1705, 5329
 Tetracyclines, 7210
 Streptomycin, 7205
Striga
Sorghum, 666
 Strontium
Glycine. Soya bean, 1660, 7167
Hordeum. Barley, 645, 2432-3, 4256
 Style, *see* flower
 Subterranean clover, *see* *Trifolium*
 Successional crops
Arachis. Groundnut, 4966
Glycine. Soya bean, 1658
Zea. Maize, 4183, 6182
 Suckling clover, *see* *Trifolium*
 Sucrose
Saccharum. Sugar cane, 6612
 Sugar
Beta. Sugar beet, 1077, 2855, 2863, 4715, 4721, 4724, 4735
Capsicum, 4829
 Crop plants, 2098
Lycopersicon. Tomato, 5223
Malus. Apple, 2977
Prunus. Peach, 4934
Solanum. Potato, 4574
Sorghum, for sugar, 229
Triticum. Wheat, 6041, 6054
Vitis, 3139, 3191-2
Zea. Maize, 573, 6150, 6198
Zea. Sweet corn, 598, 4199
 Sugar beet, *see* *Beta*
 Sugar cane, *see* *Saccharum*
 Sulphur
Vitis, 6942
 Sunflower, *see* *Helianthus*
 Sunn hemp, *see* *Crotalaria*
 Supernumerary chromosomes, *see* aneuploidy
 Swede, *see* *Brassica*
 Sweet clover, *see* *Melilotus*
 Sweet corn, *see* *Zea*
 Sweet potato, *see* *Ipomoea*
 Sweet sorghum, *see* *Sorghum*
Swietenia
 Flower, 5081
 Sex, 5081
Sylepta
Gossypium. Cotton, 1948
 Symbiosis
Pisum. Pea, 3433
Rhizobium, 3433
Synanthedon
Ribes. Black currant, 6890
 Synapsis, *see* meiosis
Synchytrium
 Physiological races, 938, 2719, 3682, 4590, 5701-2
Solanum. Potato, 200, 938, 9, 2668-9, 2713, 2719, 3682, 3700, 4590, 5701-4
 Syndesis, *see* meiosis
 Systematics, *see* taxonomy
 Synthetics
Aegilops, 3924
Bromus, 1968
Dactylis, 766
Gossypium. Cotton, 213
Lolium, 3667, 5472
Medicago, 824, 2096, 2615, 4488-9, 4492
Triticum. Wheat, 3924
Zea. Maize, 2332, 4128-30
Taeniothrips
Larix. Larch, 5112
 Tangerine, *see* citrus
 Tannin
Polygonum, 6762
Solanum. Potato, 5696
Taphrina
Prunus. Peach, 3048
 Tapioca, *see* *Manihot*
Taraxacum, for rubber
 Biotypes, 1229
 Tarragon, *see* *Artemisia*
 Taxonomy, 180-3, 1829, 3461-2, 3617-8, 7235
Acacia, for tanning, 4818
Acetobacter, 7209
 Agaricales, 7236
Agropyron, 2608
Allium, 1514
Armoracia. Horseradish, 1193
Axonopus, 6405
Beta. Sugar beet, 4723
Betula. Birch, 1459, 1461-2, 6980
Botrytis, 258
Brassica, 7054
Brassica. Sarson, 4787
Bromus, 777
Capsicum, 2909
Cocos. Coconut, 3087, 5364
Coffea. Coffee, 4770
Commelina, 1854, 4816
Corchorus. Jute, 1046, 4683
Cornus, 3485
 Crop plants, 3616, 5362
Cucumis. Melon, 3307
Cyamopsis, 4542
Cynodon, 771
Daucus. Carrot, 3260
Dichanthium, 6402
Eucalyptus, 3223, 5084-6, 6984
Euonymus, 2940
Fagus. Beech, 6978
Festuca, 780, 2579-81, 4434, 6399
Fragaria. Strawberry, 1354
Garcinia, 6876
Gossypium. Cotton, 1021, 6575-6

Taxonomy—continued
Grasses, 752, 2560, 4414, 6371
Helianthus. Sunflower, 1216
Helminthosporium, 758
Hordeum. Barley, 4244, 6248-9
Indigofera, 4542
Ipomoea. Sweet potato, 4610
Lens. Lentil, 1908
Lespedeza, 869, 2654
Linum. Flax, 2795
Lolium, 780, 2581, 4427
Lotus. Birdsfoot trefoil, 4537, 6473
Malus. Apple, 1251, 6807
Manihot. Cassava, 1121
Medicago, 4457, 4502
Musa. Banana, 1926, 5006, 6910
Onobrychis. Sainfoin, 4529, 6464
Oryza. Rice, 733, 4291, 4294, 4314, 4325-7, 6352, 6356
Petasites, 1534, 3288
Phaseolus, 127, 1624, 7144
Phytophthora, 6905
Pinus. Pine, 1479, 5100
Pisum. Pea, 3418
Plantago, 1224
Poa, 760
Populus. Poplar, 1458, 6971
Pyrus. Pear, 3008
Quercus. Oak, 3213, 3215
Rubus. Blackberry, 3104
Saccharomyces, 5346, 7225
Saccharum. Sugar cane, 2830
Solanum, for fruit, 3358
Solanum. Potato, 902, 925-9, 2705-6, 4576
Sorghum, 6314
Streptomyces, 1705, 5329
Thea. Tea, 1159
Thelephoraceae, 5358
Theobroma. Cacao, 4772
Trifolium, 2633-4
Triticum. Wheat, 382, 2239, 3993
Vaccinium, 1341, 1962
Vicia. Vetch, 2652, 4527
Vitis, 1378-9, 1896, 3139
Zea. Maize, 2363
Zea. Sweet corn, 2398
Tea, see Thea
Temperature, effect of
Abies. Fir, 1491
Allium. Onion, 1512
Avena. Oats, 4053
Beta. Sugar beet, 6636
Brassica. Sprouting broccoli, 5153
Cyperus, 4689
Dactylis, 1873
Daucus. Carrot, 7023
Glycine. Soya bean, 1674
Gossypium. Cotton, 2733, 6557
Grasses, 1871
Hordeum. Barley, 629, 650
Lycopersicon. Tomato, 1595-6
Mangifera. Mango, 6864
Medicago, 220
Nicotiana. Tobacco, 2037, 4756
Oryza. Rice, 709, 744, 3720, 6345, 6347
Phalaris, 797
Phaseolus, 200, 7145-6
Pinus. Pine, 1475
Pisum. Pea, 171
Ribes. Black currant, 3107
Saccharomyces, 3445, 5338
Trifolium. Alsike clover, 2645
Triticum. Wheat, 353, 393, 6068
Vicia. Broad bean, 159, 3606
Vitis, 3177
Zea. Maize, 589, 5548, 5564, 6203

Teosinte, see Euchlaena
Tephrosia
Anatomy, 1230
Phytophthora, 1230
Rotenoids, 6770
Terpenes
Pinus. Pine, 1477
Testa, see Seed
Tetracyclines, 7210
Streptomyces, 7210
Tetra-methyl thiram disulphide
Triticum. Wheat, 454
Tetramethyluric acid
Vicia. Broad bean, 165
Tetranychus
Gossypium. Cotton, 6543
Lycopersicon. Tomato, 7123
Mangifera. Mango, 4950
Solanum. Potato, 5710
Vitis, 6948
Teratology, see development, abnormal
Tetrazolium salts
Prunus. Plum, 6841
Texture
Cucurbita, 1551
Lycopersicon. Tomato, 7099
Thalidomide
Allium. Onion, 1508
Thea. Tea
Biochemistry, 6708
Biotypes, 6707
Breeding, 1171, 2021, 2889-90, 4758, 6706, 6717
Chimeras, 4760
Climate, 6708
Colchicine, 4760
Cold resistance, 4763-4, 6710
Colour, 2891
Fertilization, sexual, 6709
Genetics, 1157, 4759, 6709-10
Hairs, 1157, 6706
Heterosis, 4759
Leaf, 6709
Multiple alleles, 4761
Nutrients, 4762
Polyploidy, 4760
Pratylenchus, 1160, 6711
Quality, of edible product, 1157-8, 2891
Sclerenchyma, 1158
Sterility, fertility, 4761
Taxonomy, 1159
Varieties, 2093
Variety trials, 2889-91
Thelephoraceae, 5358
Taxonomy, 5358
Thelepogon
Chromosome morphology, 6404
Theobroma. Cacao
Breeding, 228, 1167-8, 3797, 4772, 4774, 6717
Ceratocystis, 4772
Colour, 2020
Development, 1172, 3751, 4777
Flower, 2020
Fungi, 4775
Genetics, 4772-3, 4778
Heat, drought resistance, 6719
Heterosis, 2019
Hybridization, 4780
Hybridization, intergeneric, 4776
Hybridization, interspecific, 2895, 4773, 4775
Leaf, 6718
Marasmius, 5544
Phytophthora, 1174, 2899, 4779, 6720
Plant collections, 2898, 4774
Pollen, 1173
Polyembryony, 2897, 4776

- Theobroma*. Cacao—continued
 Polyphenols, 4779
 Quantitative characters, 1172, 2020
 Selection, artificial, 1171
 Sterility, fertility, 4773, 4776, 4778
 Taxonomy, 4772
 Varieties, 2896
 Variation, 2019, 6718
 Variety trials, 228, 1169–70, 2021, 2027
 Viruses, 1175, 4773
Xyleborus, 4780
 Yield, 2019, 2021
- Therioaphis*
Medicago, 2631
- Thiamine
Torula, 3455
- Thielaviopsis*
Nicotiana. Tobacco, 2002, 2886, 3791, 5810–2
- Thiocyanate
Brassica. Kale, 1875, 5486
- Thorns, *see* spines
- Thrips*
Gossypium. Cotton, 2793
Nicotiana. Tobacco, 5808
- Thuja*
 Genetics, 1406
Didymascella, 1406
- Thujopsis*
 Chromosome morphology, 6987
- Thymidine, 3613
Hordeum. Barley, 628
Vicia. Broad bean, 33
- Tillering
Triticum. Wheat, 395
- Tilletia*
Avena. Oats, 5630
 Physiological races, 5655–6, 6062
Triticum. Wheat, 434–6, 450, 1905, 2247, 3845, 3848, 4025, 5610–1, 5617, 5630, 5656, 5685, 5851, 5855, 5879, 6062
- Timber, quality, *see* quality
- Timothy, *see Phleum*
- Tissue culture, 4, 36, 118
Daucus. Carrot, 5122
Lycopersicon. Tomato, 105
Nicotiana. Tobacco, 2879, 4752, 6685
Solanum. Potato, 946
- Tobacco, *see Nicotiana*
- Tomato, *see Lycopersicon*
- Toria, *see Brassica*
- Torula*
 Quality, nutritive value, 3455
 Riboflavine, 3455
 Thiamine, 3455
 Vitamins, 3455
- Torulopsis*
 Aminoacids, 1735
 Mutation, induced, 1735
- Toxic soils
Corchorus. Jute, 6591
Glycine. Soya bean, 1661
Hordeum. Barley, 3878
Oryza. Rice, 2537–9
Pennisetum, for grain, 4259
Saccharum. Sugar cane, 2847
Sorghum, 285, 682
Triticum. Wheat, 3878
Vitis, 5030–1, 6943
Zea. Maize, 285
- Toxoptera
Hordeum. Barley, 4250
- Transformation, 3, 69–72, 1700, 3571
Zea. Maize, 2342
- Translocation
Agropyron, 443, 3686
 Cereals, 3894
Gossypium. Cotton, 14, 4632
Hordeum. Barley, 4233, 4254
Musa. Banana, 3135
Sorghum, 679
Spinacia. Spinach, 3289
Triticum. Wheat, 2190, 2220, 3666, 3675, 3686, 3740, 5471
Vicia. Broad bean, 124
Zea. Maize, 2367, 3509, 4166, 6175
- Transpiration, *see* water balance
- Transporting quality, *see* quality
- Tribolium*
Sorghum, 6322
- Tributyl-2,4-dichlorobenzylammonium chloride
Allium. Onion, 1511
- Trichometasphaeria*
Sorghum, 4282
Zea. Maize, 2004, 2106, 3628, 3848, 4190
- Trichothecium*
 Antibiotics, 1737
 Ethyleneimine, 1737
- Trifolium*
 Biochemistry, 4395
 Breeding, 4384, 4506
 γ rays, 840
 Hybridization, interspecific, 4395
 Isoflavones, 4509
 Plant collections, 3803
 Pollen, 200
 Polyploidy, 200
Rhizobium, 815–8
 Seed production, 4384
 Selection, natural, 4508
 Taxonomy, 2633–4
 Varieties, 3803
 Variety trials, 203, 4507
- Trifolium*. Alsike clover
 Genetics, 2644
 Hybridization, interspecific, 841
 Polyploidy, 195, 2643
 Sterility, self, 2644–5
 Temperature, effect of, 2645
 Varieties, 4519
- Trifolium*. Crimson clover
 Growth period, 4400
 Vernalization, 4400
- Trifolium*. Minor species
 Biotypes, 1983
 Combining ability, 2648
 Genetics, 6457
 Hybridization, interspecific, 2649
 Plant collections, 6458
 Pollination, 2649
 Polyploidy, 4522, 5522
 Protein, 4522
 Quality, nutritive value, 4522
 Quantitative characters, 2648, 4522
 Sterility, fertility, 6457
 Varieties, 864, 1904, 4521
 Variety trials, 2647, 5508, 6456
 Yield, 1983
- Trifolium*. Red clover
 Anatomy, 849
 Aneuploidy, 4513
Apis, 847
 Biochemistry, 853
Bombus, 847
 Breeding, 195, 1970, 3644, 4356, 4361, 4513, 5439
 Chromosome aberrations, 850
 Cold resistance, 853
Ditylenchus, 857, 5486
 Ecotypes, 843–4, 6446

Trifolium. Red clover—continued

- Enzymes, 6450
- Erysiphe*, 855–6, 3792, 4378, 4516, 5500, 6450
- Flower, 6445, 6449
- Fruit, 4514
- Genetics, 221, 4378, 4516
- Growth period, 2639
- Heterosis, 842, 4376
- Hybridization, graft, 1892
- Hybridization, interspecific, 2635, 4506
- Kabatiella*, 1970, 4517
- Land races, 2637
- Mixtures of crops or genotypes, 5492
- Pathology, 1970
- Plastids, 4360
- Pollen, 848, 4513
- Pollination, 251, 847, 851, 6447–9
- Polyploidy, 195, 198, 845–50, 2635, 2638, 3643–4, 3699, 4380–1, 4513, 4517, 5439
- Quality, nutritive value, 2638
- Rhizobium*, 854
- Sclerotinia*, 198, 3848, 5486
- Seed, 4513
- Seed production, 852, 2640, 4515
- Selection, artificial, 2639, 3643, 4514, 6445
- Sterility, fertility, 221, 2007, 4361, 4513
- Varieties, 813, 2636, 4356, 4512, 5361, 6451
- Variety trials, 2001, 2637, 4510–1, 6444
- Viruses, 224, 855, 2007, 3792, 6451

Trifolium. Strawberry clover

- Sterility, fertility, 6455
- Sterility, self, 1874

Trifolium. Subterranean clover

- Competition, 862
- Geographical races, 4520
- Growth period, 861
- Hybridization, interspecific, 5577
- Isoflavones, 2646
- Mutation, induced, 861
- Nitrogen, 863
- Quality, nutritive value, 2032
- Radiation, 861
- Rhizobium*, 863
- Viruses, 2032, 5577

Trifolium. White clover

- Breeding, 195, 2641
- Chromosome morphology, 858
- Climate, 5578
- Cold resistance, 4518
- Combining ability, 859
- Cyanogenetic compounds, 859
- Genetics, 859–60, 2641, 5559
- Hybridization, interspecific, 4506
- Meloidogyne*, 860
- Polyploidy, 1864, 6452
- Quality, nutritive value, 6452
- Quantitative characters, 858
- Rhizobium*, 3677, 4357
- Sclerotinia*, 6454
- Selection, natural, 5578
- Sterility, fertility, 6453
- Sterility, self, 2611
- Variation, 3677, 4357
- Varieties, 2641–2
- Variety trials, 858
- Viruses, 1878
- Yield, 6452

Trigonella

- Breeding, 2630
- Polyploidy, 1897
- Rhizobium*, 2630

Tri-iodobenzoic acid

- Malus*. Apple, 2979

Tripsacum

- Genome analysis, 533

Tripsacum—continued

- Hybridization, interspecific, 533, 2321, 4141
- Meiosis, 2321
- Triticeae
 - Chromosome number, 373
- Triticum*. Wheat
 - Actinomycin, 5547
 - Adaptation, 6000–2
 - Adenine derivatives, 4008
 - Aging, 5995
 - Alternaria*, 453, 1897, 2269, 6060
 - Aminoacids, 427, 3706, 3823, 5844
 - Amphidiploidy, 348, 2183
 - Anatomy, 2250
 - Aneuploidy, 346, 380–1, 429, 2215, 2221, 3868, 3962, 6036
 - Apomixis, 6022
 - Ascochyta*, 3756
 - Back crossing, 341, 3869, 5979
 - Biochemistry, 382, 449, 3629, 3978, 5860
 - Biotypes, 271, 5595
 - Birds, 454
 - Boron, 3961
 - Breeding, 195, 207–8, 265, 271, 313, 318, 325, 327–8, 372, 438, 1970, 2028, 2124–5, 2134, 2159, 2161–2, 2187, 3516, 3871, 3950, 3994, 3996, 4004, 4029, 5491, 5635, 5942, 5964–5, 5967–9, 5986–7, 6036, 7238
 - Calonectria*, 1978
 - Caryopsis, 402, 2177, 2193, 2239, 3980, 3993, 6042
 - Cell division, 375–6, 3958, 6023, 6026
 - Cell inclusions, 375–6
 - Centres of origin, 456
 - Centromere, 2215
 - Cercospora*, 2148, 2258
 - Chemicals, effect of, 109, 6023, 6040
 - Chimeras, 2188
 - Chlorocholine chloride, 386, 458–9, 4042, 5487, 6033
 - Chlorophyll, 3976
 - Chromosome aberrations, 121–2, 346, 349, 442, 2050, 2217–8, 2223, 3960–1, 3992, 5988, 6173
 - Chromosome morphology, 374, 2214, 6024–6
 - Chromosome number, 373, 457
 - Chromosome substitution, 413, 429, 443, 1973, 1999, 2219, 2235, 3686, 3931, 4038, 5983
 - Climate, 2243, 3967, 3988, 5363, 5963, 6032
 - Cochliobolus*, 2257, 3756, 6060
 - Cold resistance, 193, 423–7, 1985, 2043, 2248, 3975, 4002–10, 6026, 6041, 6053–6
 - Colour, 1990, 5983, 5997, 6129
 - Combining ability, 2173, 2175, 3924, 6039
 - Competition, 4001, 5486
 - Cytology, 2180, 6023
 - Cytoplasmic inheritance, 398, 3705–6
 - Density of stand, 422, 2155, 4000
 - Development, 386, 551, 2224, 2239, 3917, 3990, 5546, 5955
 - Development, abnormal, 436, 5547, 5563, 6033
 - Dominance, 5975, 5979
 - Dormancy, 394
 - Ecotypes, 2176
 - Embryo, 3939
 - Endosperm, 2192, 5983
 - Enzymes, 5616, 5882
 - Erysiphe*, 1995, 2252–3, 2256, 4015–7, 5486, 5615, 5648
 - Ethyleneimine, 351, 354–5, 2045–6
 - Ethyl methanesulphonate, 378, 3890, 3946, 3964, 5999
 - Eurygaster*, 2255
 - Fertilization, sexual, 3933, 5982
 - Flower, 261, 401, 2227, 3979, 5546–7, 5563
 - Fluorescence, 425, 5637
 - Fungi, 430, 1896, 3882, 4014, 5636, 5650, 5878, 5959, 5978
 - Fusarium*, 5926
 - γ rays, 86, 102, 353, 2046, 2048–50, 2052, 2163–4, 2185, 3739, 3741–2, 3964, 5997, 6027, 6173

Triticum. Wheat—continued

Gene dosage, 2270
Genetics, 278, 287, 330, 338, 377, 391, 394, 411–2, 431, 433, 439–42, 446–8, 450, 452, 455, 1767, 1840, 1973, 1977–8, 1990, 1993, 1995–6, 2028, 2165–6, 2184, 2191–2, 2226, 2247, 2252, 2262, 3648, 3709–10, 3890, 3916–7, 3924, 3935, 3945, 3959, 3965, 3991, 4015, 4024–5, 4030–2, 4037–8, 4041, 5443, 5546–7, 5563, 5650, 5850–1, 5926, 5970–4, 6038, 6051, 6063, 6066–8
Genome analysis, 342, 379
Geography, 3918, 5973
Germination, 278, 387, 430, 3963–4, 5602
Gibberella, 2145, 4018–21, 6061
Gibberellins, 5955, 5995
Glass, cultivation under, 3919
Grain shrivelling, 6059
Growth period, 208, 389–93, 1970, 2137, 2225, 3672, 3695, 3749, 3896, 3956, 3965–9, 5363, 5942, 5971, 5979, 6003, 6031–2, 6053
Habit, 1977, 3960
Harvesting, 420
Heat, drought resistance, 194, 213, 399, 428, 2227, 3749, 3847, 3877, 4011–2, 6057–8
Height, 416, 3915
Helminthosporium, 5660
Herbicides, 2111, 3855, 6055
Heterodera, 4041
Heterosis, 340, 1906, 2168, 2172–4, 3928
History and evolution, 340, 1831, 2212, 3625, 3707–8, 3865, 3893, 3957, 4017, 5465, 5546, 5662, 5954, 6022, 6024–5, 6030
Hybrid necrosis, 4013
Hybrid varieties, 334–9, 2168–71, 3922–7, 3948, 5493, 5976–8
Hybridization, 1993, 3920–1, 3977, 5611, 5639, 5642, 5644, 5649
Hybridization, graft, 3947, 5878, 5841
Hybridization, intergeneric, 114, 188, 201, 236, 248, 268–9, 344–9, 443, 457, 1831, 2037, 2178–82, 2208, 2218, 3514, 3686, 3705–6, 3709, 3924, 3931, 3935–44, 3972–4, 4045, 4082, 5486, 5648, 5983–94, 6022
Hybridization, interspecific, 331, 342–3, 370, 426, 435, 1887, 2176–7, 3870, 3905, 3929–30, 3932–4, 3972–3, 3985, 5517, 5648, 5653, 5688, 5980–2, 6029, 6067
Hydroxylamine, 3946
Inflorescence, 2228, 3710, 3934
Infrared rays, 451
Inhibitors, 2228, 3707–8
Insects, 5633
Irrigation, 2244, 3999–4000, 6021
Land races, 3873, 3956
Leptosphaeria, 431, 4022
Lethals, 200, 331, 3918, 3932, 4013
Light, effect of, 1973
Linkage, 2167, 2253, 2256, 4016
Lodging, 429, 2191, 2249–51, 3905, 4014, 5958, 6033
Magnetism, effect of, 1753
Maleic hydrazide, 2147
Matrocliny, 5996
Mayetiola, 455
Meiosis, 377–8, 398, 2215–6, 3936, 3938, 3943, 3945, 3959
Micurinism, 345, 356, 2225, 3672, 3695, 5468, 6003, 6020, 6053
Mixtures of crops or genotypes, 1847
Multiple alleles, 3708
Mutation, 1832, 3648, 3826, 5443
Mutation, induced, 86, 100–2, 109, 341, 350–5, 378, 1753, 2041–9, 2052, 2125, 2184–93, 2223, 3475, 3666, 3739–40, 3742, 3890, 3945–6, 3960, 5471, 5995
Mutation, spontaneous, 2241
Neutrons, 353, 1753, 1832, 2164, 2186, 3945
Nitrate reductase, 383
Nitrogen, 1897, 2246, 2251, 3886, 3990
N-Nitrosoethylurea, 3475
N-Nitrosomethylurea, 3475

Triticum. Wheat—continued

Nucleolus, 348, 1851
Nutrients, 385, 414–5, 2140, 2155, 2245, 3987, 6052
Nucleic acids, 2217, 5615
Ophiobolus, 432, 2258
Oscinella, 5662
Oulema, 456
Oxygen, 121, 3739
Pathology, 5635, 5651, 5848
Phorbia, 5661
Photoperiodism, 392–3, 2165, 3967, 6002, 6083
Photosynthesis, 112, 3976, 3997, 6030
Physiology, 384, 3662, 5459
Phytophaga, 5663
Plant collections, 254, 275, 418, 2240–1, 3835, 3994–5, 5848, 6048–9
Pollen, 3977–8
Pollination, 333, 337, 396, 1993, 2052, 2168, 3744, 3974, 5977, 6020, 6034–5
Polyploidy, 112, 248, 347, 382, 435, 2223, 3740–1, 3823, 3959, 3963, 5617, 5648, 5989, 6022, 6027–9, 6067
Protein, 2028, 2193, 2238, 3625, 3697, 3991–2, 5465, 5998, 6045–7
Pruning, 6047
Puccinia, 189, 212, 225, 287–91, 293–306, 312–20, 338, 370, 437–51, 1897, 1899, 1988, 1990, 2047, 2147, 2156, 2247, 2261–8, 3675, 3682, 3749, 3802, 3881–3, 3935, 3941, 3999, 4026–39, 4082, 5486, 5500, 5637–49, 5653, 5686, 5688, 5844–5, 5852–4, 5857–8, 5860, 5876, 5880–2, 5994, 6004, 6064–80
Quality, 1970, 6032
Quality, for milling and baking, 200, 261, 338, 370, 403–16, 420, 1909, 1999, 2028, 2042, 2170, 2173, 2175, 2209–11, 2222, 2231–7, 2255, 2268, 3621, 3873, 3887, 3912, 3940, 3981–9, 5522, 5946, 5969, 5972, 6031, 6043–4
Quality, for storage, 430
Quality, nutritive value, 281, 2238, 6032
Quantitative characters, 100–1, 2125, 2166, 2174, 2184, 3896, 3968–9, 5971, 5979
Radiation, 101, 122, 341, 352, 355, 2044
Root, 400, 3958
Schizaphis, 455
Seed production, 2171, 2242
Seedlings, 1987
Segregation, 2037, 2233, 3919, 6028, 6035
Selection, artificial, 400, 2194–5
Selection, natural, 2194–5
Septoria, 225, 452
Sex, 2189
Somatic chromosome association, 2213
Sowing, 419, 3966, 4009
Starch, 417
Statistics, experimental designs, 2128
Statistics, genetics, 1767
Stem, 2191, 2226, 2250, 5958, 5979
Sterility, fertility, 338, 349, 381, 2168, 2176, 2190, 3666, 3705, 3741, 3977, 5471, 6036
Sterility, male, 339, 343, 398–9, 1865, 2050, 2221, 3872, 3925–7, 3961, 3970–4, 5486, 5493, 6037–8, 6039–40
Sugar, 6041, 6054
Synthetics, 3924
Taxonomy, 382, 2239, 3993
Temperature, effect of, 353, 393, 6068
Tetra-methyl thiram disulphide, 454
Tillering, 395
Tilletia, 434–6, 450, 1905, 2247, 3845, 3848, 4025, 5610–1, 5617, 5630, 5656, 5685, 5851, 5855, 5879, 6062
Toxic soils, 3878
Translocation, 2190, 2220, 3666, 3675, 3686, 3740, 5471
Twinning, 2229
Typhula, 6081
Urocystis, 1996, 6063
Ustilago, 189, 433, 1899, 2259–60, 4023–4, 5616, 5652–6, 5850, 5859, 5883

Triticum. Wheat—continued

- Variation, 1767, 3662, 3921, 5459
- Varieties, 201, 212, 274, 276, 357–72, 388, 1893, 1896–7, 1909, 1966, 2008, 2131–2, 2157, 2196–211, 2239, 3516, 3697, 3759, 3835, 3863, 3948–55, 3996, 4007, 4033–4, 5487, 5490, 5523, 5940, 5949–50, 5953, 6013–21
- Variety trials, 203, 225, 323–4, 326, 2150–4, 2157–8, 2160, 2169, 2249, 3862–3, 3902–4, 3906–9, 3912, 4029, 5939, 5959, 5966, 5978, 6000–1, 6031
- Vernalization, 2224, 2256, 2270, 3896, 3968–9
- Viruses, 450, 457, 2032, 2247, 3661, 5458, 6082
- Vitamins, 3975, 3986
- Water balance, 428
- Weight, 3990
- Water, effect of, 414
- X rays, 100, 121, 329, 351, 2184, 2217, 2223, 3960, 3963, 5998
- Yield, 395, 400, 414, 421–2, 2140–1, 2175, 2243, 3662, 3948, 3997–8, 4010, 4039, 5459, 5975, 5989, 6032, 6042, 6050–1

Tryptophane, 3557

Zea. Maize, 6142

Tuber

Solanum. Potato, 920, 4587

Tumours

Nicotiana. Tobacco, 1134–5

Tung, see *Aleurites*

Turnip, see *Brassica*

Turpentine

Pinus. Pine, 6998

Twinning

Hordeum. Barley, 2424, 4238

Pisum. Pea, 3419

Triticum. Wheat, 2229

Twitch, see *Agropyron*

Typhala

Cereals, 5962

Hordeum. Barley, 5962

Triticum. Wheat, 6081

ULMUS. Elm

Breeding, 1429, 5077

Ceratocystis, 1423, 3210, 5039, 5077, 6951

Colchicine, 5075

Growth period, 1423

Hybridization, interspecific, 5543

Pollen, 5076

Polyploidy, 5075

Ultraviolet rays

Aspergillus, 106, 1709, 5330

Candida, 1711

Claviceps, 7212

Saccharomyces, 1719, 5337

Ustilago, 5372

Uncinula

Vitis, 1389, 5035, 5746, 5874, 5923, 6946

Urocystis

Triticum. Wheat, 1996, 6063

Zea. Maize, 5884

Uromyces

Cereals, 2146

History and evolution, 2146

Leguminous forage crops, 5727

Medicago, 837

Phaseolus, 1617, 1954, 2004, 5267, 5273–4, 5276, 7151

Physiological races, 5274, 7151

Pisum. Pea, 5727

Ustilago, 1708, 5372

Avena. Oats, 475–6, 1963, 2287–8, 2070

Biochemistry, 4070

Cell division, 2437

Cereals, 2106

Genetics, 587, 6278

Hordeum. Barley, 649–50, 1896, 1963, 2436–7, 5612–3, 5618, 5654, 5861, 6278–9

Ustilago—continued

Hybridization, interspecific, 6278

Panicum, 5680

Physiological races, 476, 1896, 2260, 2288, 5652, 5654–6, 5669, 5671, 5859, 5883

Poa, 763

Saccharum. Sugar cane, 225, 1056, 1902, 4692, 4706, 6615, 6617

Segregation, 1708, 5372

Sex, 6617

Triticum. Wheat, 189, 433, 1899, 2259–60, 4023–4, 5616, 5652–6, 5850, 5859, 5883

Ultraviolet rays, 5372

Zea. Maize, 534–5, 587, 5666–75, 5677–8, 5884

VACCINIUM

Breeding, 1340, 2954, 3110

Genetics, 1962

Hybridization, interspecific, 3647, 4842, 5442

Morphology, 1341

Polyploidy, 1962

Quality, for freezing, 2959, 3112

Sterility, female, 3111

Sterility, male, 1962

Taxonomy, 1341, 1962

See also *Oxycooccus*

Valerian, see *Valeriana*

Valeriana

Varieties, 1893

Valsa

Populus. Poplar, 1413

Variation, 152, 3652, 5449, 5549, 5566

Arrhenatherum, 2582

Betula. Birch, 1460

Botrytis, 258–9

Brassica. Sarson, 4787

Capsicum, 6724

Coix, 6370

Crop plants, 4351, 5623

Dactylis, 4419–20

Fagus. Beech, 6978

Festuca, 6397

Forest trees, 5059–60

Fragaria. Strawberry, 6899

Glycine. Soya bean, 5286, 5291–2

Gossypium. Cotton, 4668

Grasses, 1871, 2555, 4373

Helianthus. Sunflower, 1212

Hordeum. Barley, 6248–9, 6269

Larix. Larch, 5049–50

Lespedeza, 2656

Leucaena, 5080

Lolium, 781, 4355

Lycopersicon. Tomato, 7105

Medicago, 2615, 5550

Nicotiana. Tobacco, 1137, 1793–4, 2874, 3731, 4757

Oenanthe, 1533

Onobrychis. Sainfoin, 867

Oryza. Rice, 713, 2507, 3717, 3719

Pennisetum, for grain, 6292–4

Phalaris, 4437, 5568

Phaseolus. Lima bean, 7153

Pinus. Pine, 5092

Populus. Poplar, 1413

Prunus. Cherry, 3033

Quercus. Oak, 1444

Saccharum. Sugar cane, 2825

Setaria, 6287–8

Sorghum, 2462

Theobroma. Cacao, 2019, 6718

Trifolium. White clover, 3677, 4357

Triticum. Wheat, 1767, 3662, 3921, 5459

Vitis, 1239, 3150–1

Zea. Maize, 272, 495, 2345–8, 4102, 4151–2,

Variation

- Lycopersicon*. Tomato, 3649, 5444
Nicotiana. Tobacco, 1136
Phaseolus, 3373
Vicia. Broad bean, 1613
- ## Varieties
- Actinidia*, 3094
Agropyron, 2096
Agrostis, 5361
Allium, 3268
Allium. Garlic, 3253, 3269, 5137
Allium. Onion, 224, 1500, 3241, 3252-3, 3263, 7032
Amelanchier, 1296
Annona, 3069
Arachis. Groundnut, 1308-9, 1893, 1899, 1960, 3752, 4963
Arrhenatherum, 791
Artemisia, 3427
Ariocarpus, 3068
Asparagus, 3684
Avena. Oats, 274, 468, 2026, 2131, 2275-80, 3755, 3802, 3862-3, 3892, 4055-9, 5487, 5490, 5538, 5950, 5953, 6092-6
Averrhoa, 2097
Beta. Beetroot, 224, 3240-1, 3251, 5119
Beta. Chard, 1968, 5119
Beta. Mangel, 6479
Beta. Sugar beet, 1078-80, 2862, 3815, 5792
Brassica. Brussels sprouts, 3252, 3815
Brassica. Cabbage, 1521, 3252, 3254, 3276-7, 3815
Brassica. Cauliflower, 240, 2092, 3254, 3277, 3283, 3755
Brassica. Kale, 5361, 7037
Brassica. Kohl Rabi, 2665, 5599
Brassica. Mustard for oil, 2915
Brassica. Rape, 1197, 1973, 2096, 2915, 2920, 4791-2, 6736-7
Brassica. Swede, 3755
Brassica. Turnip, 2091, 4547
Bromus. 774-5, 1964, 4425
Cajanus, 1696
Cannabis. Hemp, 1039-40, 2798-9, 3684, 5478
Capsicum, 1191, 1500, 2908, 3253, 3821, 6725-6
Carica. Papaya, 3097
Carthamus. Safflower, 2933
Castanea. Chestnut, 3075, 4954
Crop plants, 219, 241-2, 2040, 2094, 3816-9, 3821, 3843, 5520, 5598
Cucumis. Cucumber, 1554, 3241, 3251, 3253, 3755, 5179-80
Cucumis. Melon, 3306, 5166, 7071
Cucurbita, 1550, 3314, 5172
Cucurbits, 5162
Dactylis, 764-5, 2566, 6372
Daucus. Carrot, 224, 2091-2, 3252, 3258, 3260, 5121
Dioscorea. Yam, 4743
Diospyros. Persimmon, 3071, 6865
Eriobotrya. Loquat, 1270, 2097
Festuca, 788, 1964, 2096, 4433, 5536, 6372
Fragaria. Strawberry, 1236, 1349-51, 1962, 2949, 3121-3, 4842, 4994, 4996-5001, 5536, 6900-1
Fruit crops, 2018, 2955, 4868-70, 4872, 6783-5
Glycine. Soya bean, 213, 1650-1, 2055, 2093, 2095-6, 3391-5, 5241, 5293, 7165-6
Gossypium. Cotton, 201, 216, 975, 1001-6, 1893, 1932, 2735, 2738, 2762, 2785, 4636-42, 4650, 4657, 5817, 6548, 6562-4
Grasses, 1964, 2556-8, 4388
Helianthus. Sunflower, 1210, 1214, 2096, 2930, 4809-10
Hevea. Rubber, 4833-4, 6769
Hibiscus, 1051
Hibiscus, as vegetable, 3359
Hordeum. Barley, 196, 199, 201, 203, 207, 240, 243, 265, 274, 276, 621-7, 1902, 2096, 2131-2, 2410-3, 2430, 3820, 3862-3, 4207, 4226-9, 5487, 5490, 5538, 5664, 5940, 6229-30, 6255-9, 6273, 7018

Varieties—continued

- Humulus*. Hop, 1179, 2026, 6776
Ipomoea. Sweet potato, 948, 2725, 4610, 6538
Juglans. Walnut, 1300-1, 3073, 4951
Lactuca. Lettuce, 240, 1538, 2091-2, 3251, 3292-4, 5114, 5599, 7062
Leguminous forage crops, 4388
Lens. Lentil, 1908, 3426
Lespedeza, 2655
Linum. Flax, 1032, 1037, 2093, 2794, 2796, 4673-4, 5836
Linum. Linseed, 2926, 3802, 4801
Linum, 244, 2092, 2572-3, 4406, 4428, 5361, 6372, 6382
Lotus. Birdsfoot trefoil, 2661
Lupinus. Lupin, 875, 2003, 2659, 3694, 3763, 5361
Lycopersicon. Tomato, 223, 1238, 1500, 1575-7, 1970-1, 3251, 3253-4, 3338-45, 5114, 5211-5, 5543, 7107-8, 7111, 7119
Malus. Apple, 1247-51, 2002, 2947, 2966-76, 4887-8, 5765, 6796-800, 6814
Mangifera. Mango, 4948
Medicago, 827, 2617-9, 4474, 4493-6, 6426-7
Melicocca, 6877
Mentha, 2093, 7203
Musa. Banana, 6910
Nicotiana. Tobacco, 1139-40, 1963, 2002, 2004, 2011, 2095, 2875-7, 3789, 4751, 6656, 6658, 6684, 6688
Olea. Olive, 4974
Oryza. Rice, 206, 716-25, 1893, 2093, 2496, 2499, 2512-26, 3798, 3820, 4306-13, 6335-41
Panicum, for grain, 2443, 6284
Paspalum, 6400
Pennisetum, 6409
Pennisetum, for grain, 1904, 2121, 2133, 2598, 6295
Persea. Avocado, 6878, 6885
Phalaris, 5569
Phaseolus, 240, 1620, 2055, 2091-2, 3376-7, 3379-81, 5241, 5260, 5262-4, 5277, 5599
Phaseolus. Lima bean, 7147, 7154
Phleum, 2095-6, 6372
Pistacia. Pistachio, 4960
Pisum. Pea, 243, 1962, 2091, 3254, 3360, 3413-4, 3696, 3755, 5307-9, 5518, 7188-9
Poa, 5361
Populus. Poplar, 5067, 6951, 6969-70
Prunus. Almond, 1304
Prunus. Apricot, 1238, 3071, 4914-5
Prunus. Cherry, 220, 1278-9, 3034, 4923-5, 6846
Prunus. Nectarine, 4937
Prunus. Peach, 3047, 3050-2, 3773, 4863, 4928-31, 5534, 6848-9
Prunus. Plum, 1275, 2956, 4920, 6837-9
Pulses, 7131
Pyrus. Pear, 220, 1264-5, 3005-7, 4907-8
Raphanus. Radish, 3254, 5124, 7027
Ribes, 2950
Ribes. Black currant, 2950, 3105, 6890
Ribes. Gooseberry, 3108
Ribes. Redcurrant, 6889
Ricinus. Castor oil plant, 1202, 1899, 6740
Rubus. Raspberry, 1335, 1962, 2002, 4979
Saccharum. Sugar cane, 1058, 1065, 1950, 1960, 2097, 2839-46, 4474, 4692, 4696, 6601, 6605-11
Sambucus. Elder, 220
Sesale. Rye, 1875, 2131-2, 4083, 5487, 5490
Sesamum. Sesame, 1204, 1893, 6744
Solanum. Egg plant, 1598, 3253-4
Solanum. Potato, 893, 906-15, 1960, 2093, 2687-94, 4559-68, 5361, 5486, 5536, 5698, 6499-505, 7239
Sorghastrum, 2588
Sorghum, 244, 801, 1897, 1956, 2121, 2133, 2465, 4273-4, 4280, 4442-3, 5522, 6317-8, 6401
Sorghum, for sugar, 3779
Spinacia. Spinach, 2091-2, 3684
Stone fruits, 6782
Thea. Tea, 2093

Varieties—continued

- Theobroma*. Cacao, 2896
Trifolium, 3803
Trifolium. Alsike clover, 4519
Trifolium. Minor species, 864, 1904, 4521
Trifolium. Red clover, 813, 2636, 4356, 4512, 5361, 6451
Trifolium. White clover, 2641-2
Triticum. Wheat, 201, 212, 274, 276, 357, 388, 1893, 1896-7, 1909, 1966, 2008, 2131-2, 2157, 2196-211, 2239, 3516, 3697, 3759, 3835, 3863, 3948-55, 3996, 4007, 4033-4, 5487, 5490, 5523, 5940, 5949-50, 5953, 6013-21
Valeriana, 1893
Vegetable crops, 3255, 7017, 7019-20
Vicia. Broad bean, 5246-8
Vicia. Vetch, 4526
Vigna. Cowpea, 1065, 1633, 2003, 3388, 3821, 5281, 7155
Vitis, 1238, 1370-1, 2002, 3139, 3152-64, 5016-9, 5749, 6916-24
Zea. Maize, 206, 542, 581, 1956, 2121, 2133, 2310, 2358-60, 2362, 3748, 3752, 4118, 4162, 5514, 5543, 6163-4
Zea. Popcorn, 4161
Zea. Sweet corn, 4161, 6221
Vegetable crops, 7241
Breeding, 1236, 3242, 5115
Hybrid varieties, 1497, 5365
Hybridization, 1495
Land races, 3256
Plant collections, 5117
Pollination, 1495
Quality, for canning, 1872
Quality, for freezing, 1501
Quality, of edible product, 3640
Varieties, 3255, 7017, 7019-20
Variety trials, 1231-3, 1493, 1881, 1885, 2022, 2942, 2944, 4838-41, 5116
Vegetable marrow, *see Cucurbita*
Vegetative hybridization, *see* hybridization
Vegetative period, *see* growth period
Vegetative reproduction
Ananas. Pineapple, 3138
Cucumis. Melon, 7073
Festuca, 789-90
Forest trees, 5047
Fragaria. Strawberry, 6903
Malus. Apple, 2958, 2965
Populus. Poplar, 1457
Stone fruits, 2958
Vein necrosis
Solanum. Potato, 932
Venturia
Adaptation, 2997
Malus. Apple, 2994, 2996-7, 3686, 5757-9, 5761, 5764, 5783, 6815, 6817
Physiological races, 2997
Prunus. Peach, 3048
Pyrus. Pear, 3686, 5756-7, 5760
Verbena
Polyploidy, 4824
Vernalization
Brassica. Cabbage, 5147
Cereals, 2135
Hordeum. Barley, 3896
Lolium, 786
Phalaris, 5557, 5571
Secale. Rye, 2298
Trifolium. Crimson clover, 4400
Triticum. Wheat, 2224, 2256, 2270, 3896, 3968-9
Vicia. Vetch, 6463
Verticillium
Capsicum, 5715-6, 6731
Crop plants, 260, 3852-3

Verticillium—continued

- Fragaria*. Strawberry, 1358-9, 1962, 6907
Gossypium. Cotton, 1022-3, 1025-8, 2789-91, 4642, 4657-62, 5817, 5820-2, 5824-6, 5828-34, 5847, 5900-4, 5908, 6583
Griseofulvin, 3853
Helianthus. Sunflower, 1217
Humulus. Hop, 1179, 2900
Lycopersicon. Tomato, 1590, 1965, 5232, 5715
Medicago, 195, 838, 4380, 6439
Nicotiana. Tobacco, 2887
Physiological races, 2790-1, 4658-60, 5826, 5832
Solanum. Egg plant, 1238, 5716
Solanum. Potato, 887, 901, 4591, 5534, 6526
Stone fruits, 5782
Vetch, *see Vicia*
Vicia. Broad bean
Aflatoxin, 3480
Aneuploidy, 5249
Arabinosyl-adenine, 3607
Ascochyta, 5864
Ascorbic acid, 1610
Bacteria, 5731
Biochemistry, 26
Breeding, 195, 5239
Cell division, 158-60, 1607, 1812, 1814, 3480, 3581, 3597, 5415
Chemical effects of, 141, 1605, 1613, 1896, 3481, 3607, 3609-10
Chlorocholine chloride, 3608
Chromosome aberrations, 26, 33, 111, 113, 125, 165, 167-8, 170, 1608, 1814, 1817, 1896, 3479-81, 3491, 3597, 3603, 3606-10, 5404, 5426
Chromosome, fine structure, 1606
Colchicine, 113, 160, 1812, 3365
Colour, 3240, 5251
Combining ability, 3363, 7132
Diepoxybutane, 125
Ethyleneimine, 1605
Fertilization, sexual, 1610
Flower, 5250
5-Fluorodeoxyuridine, 1817, 3597, 5404
5-Fluorouracil deoxyribosides, 1817, 5404
 γ rays, 1604-5, 2061
Genetics, 5244-5
Growth period, 5526, 7133
Heterosis, 3363
Hybrid varieties, 3367
Hybridization, 1604
Hydroxyurea, 3597
Indole-3-acetic acid, 160
Macrosiphum, 1612
Meiosis, 161
Mixtures of crops or genotypes, 3367
Molecular genetics, 1783, 3570, 5394
Mutation, induced, 33, 141, 1605, 1804, 2061, 3581, 5404
Myzus, 1612
Neutrons, 1817
Nitrosoethylurethane, 111
Nucleolus, 1851
Nucleic acids, 1607, 3491
Peat, 1804
Phleomycin, 3581
Plant collections, 7134
Pollination, 1609, 3366, 5486, 7134-5
Polyploidy, 3365
Population genetics, 3364
Purine derivatives, 158
Pyrogallol, 5426
Radiation, 167, 170, 5404
Radioactive isotopes, 1783
Sclerotinia, 5253
Seed, 5251-2
Selection, artificial, 3364
Shedding, 7134

Vicia. Broad bean—continued

Size, 5252
Sound waves, 3603
Sterility, fertility, 3240, 3363
Sterility, male, 5486
Sterility, self, 1865
Temperature, effect of, 159, 3606
Tetramethyluric acid, 165
Thymidine, 33
Translocation, 124
Variegation, 1613
Varieties, 5246-8
Variety trials, 3362, 5243, 5251
Viruses, 1612
X rays, 161, 168

Vicia. Vetch

Amphidiploidy, 4525
Aneuploidy, 4525
Breeding, 865, 4523-4
Cell division, 156
Chromosome morphology, 2651
Cold resistance, 1887, 4524, 6460
Development, 6460
Development, abnormal, 866
 γ rays, 156, 2061
Genetics, 6461
Geographical races, 2650
Growth period, 188-9, 6461-3
Habit, 6463
Hybridization, intergeneric, 5304
Hybridization, interspecific, 4365
Land races, 6459
Leaf, 6459
Mutation, induced, 2061
Polyploidy, 2061
Quantitative characters, 4524
Seed, 2652
Taxonomy, 2652, 4527
Varieties, 4526
Vernalization, 6463

Vigna. Cowpea

Biochemistry, 7156
Chromosome number, 229
Hybridization interspecific, 3747
Plant collections, 1633
Pollination, 229
Varieties, 1065, 1633, 2003, 3388, 3821, 5281, 7155
Variety trials, 3361, 5528
Viruses, 206, 1634-5, 2003, 3748, 5527, 7156

Vine, see *Vitis*

Viruses, 1789

Agropyron, 457
Allium. Onion, 5720
Amonum, 2904
Arachis. Groundnut, 1860, 1955
Avena. Oats, 2149, 4075
Beta, 200
Beta. Mangel, 198
Beta. Sugar beet, 1118, 3657, 4738-40, 5454, 5486, 5890
Brassica. Turnip, 2026
Capsicum, 206, 1189, 2004, 2905, 2913, 4830, 6731-2
Cereals, 1868
Citrus, 208
Cocos. Coconut, 1322-4
Crop plants, 2108-9, 3656, 5453, 5631, 5936
Cucumis. Cucumber, 5185
Daucus. Carrot, 2941
Digitalaria, 2595
Fragaria. Strawberry, 1360-2, 3658, 5455
Fruit crops, 4857
Glycine. Soya bean, 1673, 3408
Gossypium. Cotton, 2742
Hordeum. Barley, 654-6, 1878, 1998, 2149, 2440, 3660, 5457, 6259, 6283
Lactuca. Lettuce, 1541, 3295

Viruses—continued

Lolium, 1868, 1878
Lupinus. Lupin, 4398, 6470
Lycopersicon. Tomato, 1591-6, 2943, 3354-5, 3802, 5233-4, 5500, 5893, 5926, 6008
Malus. Apple, 2961, 3000-3, 4862, 6818
Manihot. Cassava, 205, 5527, 6644
Molecular genetics, 3683
Nicotiana. Tobacco, 1154-5, 2888, 3683, 3753, 5805, 5815-6, 6666, 6668, 6695, 6703
Oryza. Rice, 745, 1848, 2550-1, 4291, 6369
Phaseolus, 1631, 3387, 5926
Phleum, 1878
Physiological races, 656, 1058, 1155, 1175, 1635, 2915, 5234, 5926, 6668
Pisum. Pea, 1675, 2032, 3800, 5729
Populus. Poplar, 6977
Prunus. Apricot, 3019
Prunus. Cherry, 1283, 3041-2
Prunus. Peach, 3043, 3053
Prunus. Plum, 2960-1, 3026-30
Pyrus. Pear, 4862, 6828
Ribes, 5757
Ribes. Black currant, 5787
Saccharum. Sugar cane, 1058-9, 2853-4, 3764, 4692, 4708
Solanum. Potato, 888, 939, 943-5, 2674, 2713, 2720-3, 3659, 3686, 3752, 4602-7, 5456, 5705-8, 5896, 6531-4
Sorghum, 3661
Stone fruits, 2960, 3015
Theobroma. Cacao, 1175, 4773
Trifolium. Red clover, 224, 855, 2007, 3792, 6451
Trifolium. Subterranean, clover, 2032, 5577
Trifolium. White clover, 1878
Triticum. Wheat, 450, 457, 2032, 2247, 3661, 5458, 6082
Vicia. Broad bean, 1612
Vigna. Cowpea, 206, 1634-5, 2003, 3748, 5527, 7156
Vitis, 6949
Zea. Maize, 596, 1897, 2391-4, 3661, 3779, 4196, 6220
Viscum extracts
Allium. Onion, 176, 3599
Vitamins
Gossypium. Cotton, 6567
Triticum. Wheat, 3975, 3986
Vitis
Aging, 5011
Agrobacterium, 3174
Aminoacids, 3200
Anthocyanin, 3139, 3189
Biochemistry, 1392, 3139, 6929, 6945
Biotypes, 1372, 3167
Breeding, 1844, 2951, 3139-42, 3147, 3195, 4991, 5011, 5021, 5538, 5741, 5750
Centres of origin, 5020
Chemicals, effect of, 1374, 1896, 3176
Chromosome number, 3166
Citric acid, 3139
Climate, 3171-2, 6936
Cold, effect of, 3148, 3177
Cold resistance, 1373, 3196-200, 5032, 6944-5
Colour, 3150, 3172, 5028, 5036
Development, 1375
Development, abnormal, 1380
Ecology, 6935
Ecotypes, 6925-6
Enzymes, 1373, 3169, 5873
Eriophyes, 3164
Flower, 1380, 6933
Fruit, 5010
Fungi, 5739, 5751, 5754
Genetics, 2004, 3139, 3149-50, 3189, 5009-11, 5033-4, 6914
Gibberellins, 1388, 4991, 6931
Grafting, 1368, 1377, 3173-4, 5037
Growth period, 1391, 3169-72, 5011, 5035

Vitis—continued
 History and evolution, 3166, 5019, 6925-6
 Hormones, 1374
 Hybridization, 1366, 1377, 5015, 5742
 Hybridization, interspecific, 226, 1367-8, 1887, 3139, 3161, 3189, 5009, 5012, 5739, 5748, 5755, 5872, 5922, 6915
 Inflorescence, 6934
 Land races, 3165
 Leaf, 1379
 Malvin, 1378, 3190
 Manganese, 3139
 Micurinism, 6928-30
 Mutation, induced, 1239, 5743-4
 Mutation, somatic, 5013-4, 6925
 Nutrients, 6941
 Parthenocarpy, 6923, 6931
 Pathology, 5745, 5748, 5921
 Phosphorus, 6941
Phylloxera, 1392, 3201, 5034, 5740, 5743, 5748-52, 5754-5, 6947
 Plant collections, 3193-5, 5029, 5745
Plasmopara, 5033, 5740-4, 5746-7, 5872-3, 5922-3
 Pollen, 3175-6
 Pollination, 5011, 5022, 6927-30
 Polyploidy, 5021
 Pruning, 1376, 5023
 Punched cards, 1379, 5749
 Quality, for storage, 3178-9, 6938
 Quality, for transporting, 3180-2, 5013
 Quality, nutritive value, 3164
 Quality, of edible product, 1381-2, 3192, 5011, 5018, 5024, 6914, 6923, 6931, 6936-7
 Quality, of wine, 1366, 1383-6, 3147, 3151, 3162-3, 3170, 3173, 3183-8, 5018, 5025-8, 5748, 6935, 6939-40
 Reductones, 6940
Sclerotinia, 1390-1, 5753, 5922
 Segregation, 5011, 5748
 Serology, 5037
 Sex, 1374, 2004, 3168
 Sex chromosomes, 1752
 Shedding, 1376
 Sterility, fertility, 3175-6, 5012, 5023, 6934
 Sterility, male, 1896
 Sugar, 3139, 3191-2
 Sulphur, 6942
 Taxonomy, 1378-9, 1896, 3139
 Temperature, effect of, 3177
Tetranychus, 6948
 Toxic soils, 5030-1, 6943
Uncinula, 1389, 5035, 5746, 5874, 5923, 6946
 Variation, 1239, 3150-1
 Varieties, 1238, 1370-1, 2002, 3139, 3152-64, 5016-9, 5749, 6916-24
 Variety trials, 1365, 1367, 1387, 3139, 3143-6, 3148, 3173, 6913
 Viruses, 6949
 Wax, 6932
 Xenia, 1369
 Yield, 1382, 1388
 Vivipary
Deschampsia, 2600

WALNUT, *see Juglans*

Water balance
Beta. Sugar beet, 5797
 Cereals, 250
Larix. Larch, 7015
Linum. Flax, 250
Lolium, 6393
Oryza. Rice, 2541, 4318
Prunus. Peach, 4932, 6850
Pyrus. Pear, 6825
Ricinus. Castor oil plant, 2923

Water balance—continued
Solanum. Potato, 2686
Triticum. Wheat, 428
 Water, effect of
Avena. Oats, 6102
Beta. Sugar beet, 1077
Fagus. Beech, 5074
Gossypium. Cotton, 6551, 6570
Helianthus. Sunflower, 4811
Hordeum. Barley, 613, 2435
Lolium, 6393
Nicotiana. Tobacco, 2087
Pisum. Pea, 1684, 3417
Saccharum. Sugar cane, 6619
Triticum. Wheat, 414
Zea. Maize, 4177
 Water melon. *See Citrullus*
 Waterlogging
Oryza. Rice, 1935, 2539
Populus. Poplar, 6972
Saccharum. Sugar cane, 1056, 2827
 Wax
Vitis, 6932
 Weight
Dioscorea. Yam, 4742
Fragaria. Strawberry, 6904
Pinus. Pine, 5098
Triticum. Wheat, 3990
See also Gravity
 Wheat. *See Triticum*
 Wheat grass. *See Agropyron*
 White clover. *See Trifolium*
 Wide hybridization. *See Hybridization*
 Willow. *See Salix*
 Wind
Gossypium. Cotton, 2772
 Wine. *See Quality*
 Winter habit. *See Growth period*
 Winter hardiness. *See Cold resistance*
 Wood quality. *See Quality*
 X RAYS, 117, 133-5, 3579, 3583, 3604, 3611-3
Acer, 2078
Arachis. Groundnut, 1859
Beta. Sugar beet, 1089, 4716
Chlorella, 1698
Citrus, 3060
Corchorus. Jute, 2803, 4682, 4684
Crotalaria, for fibre, 1047
Fragaria. Strawberry, 4992
 Fruit crops, 6845
Hordeum. Barley, 614, 632, 2408, 3900, 4214
Lupinus. Lupin, 6469
Lycopersicon. Tomato, 24, 1571, 3327, 7096
Mycobacterium, 1703
Nicotiana. Tobacco, 3730
Oryza. Rice, 2495, 2500, 2528, 3724, 3900, 6332
Pinus. Pine, 1475, 5094
Pisum. Pea, 1679, 2057, 5311, 7178
Poa, 195
Prunus. Cherry, 3034
Saccharomyces, 23, 3435-6, 3443-4, 3499-500, 5342, 7214
Secale. Rye, 1754
Sesamum. Sesame, 1858
Solanum. Potato, 904, 6493
 Stone fruits, 1976
Triticum. Wheat, 100, 121, 329, 351, 2184, 2217, 2223, 3960, 3963, 5998
Vicia. Broad bean, 161
Zea. Maize, 17, 1976, 2001, 3470, 6176
 Xanthomonas
Capsicum, 6729
 Crop plants, 1065
Glycine. Soya bean, 3406, 7170

Xanthomonas—continued

- Gossypium*. Cotton, 958, 963, 1901, 1954, 2731–2, 3747, 4653, 5821, 5823, 5835, 5906, 6542, 6579
Lycopersicon. Tomato, 5226
Oryza. Rice, 4291
Phaseolus, 5500
Physiological races, 737, 5823
Prunus. Peach, 4936
Saccharum. Sugar cane, 1058–9, 1065, 1960, 3752, 4698
Sorghum, 4282

Xenia

- Castanea*. Chestnut, 3076
Vitis, 1369
Zea. Maize, 6186

Xyleborus

- Theobroma*. Cacao, 4780

Xylem

- Pinus*. Pine, 6999

YAM, see *Dioscorea*

Yeast, see *Saccharomyces*

Yield

- Arachis*. Groundnut, 4966
Astragalus, 4540
Avena. Oats, 471, 2140, 4065
Beta. Sugar beet, 1114, 4724, 4733, 6634
Cereals, 282, 3879, 5956
Cicer. Chickpea, 7198
Coffea. Coffee, 2023
Cynodon, 772
Festuca, 1877, 5486
Fragaria. Strawberry, 4851
Glycine. Soya bean, 1643, 1657
Gossypium. Cotton, 2063, 6577
Grasses, 5486
Helianthus. Sunflower, 1215
Hordeum. Barley, 4233, 5534, 6269
Humulus. Hop, 4783
Ipomoea. Sweet potato, 950
Linum. Linseed, 1900, 4798, 6748
Lotus. Birdsfoot trefoil, 6474
Malus. Apple, 2990, 4886, 4898–9, 5501
Medicago, 1989, 2628, 3668, 5474
Nicotiana. Tobacco, 4756
Onobrychis. Sainfoin, 1980, 2653
Oryza. Rice, 713, 734, 2478, 2531, 4295
Pennisetum, for grain, 6294
Persea. Avocado, 6886
Phaseolus, 1625, 3382, 3384, 5268
Phleum, 1877
Pisum. Pea, 1689
Poa, 761
Prunus. Cherry, 1279
Saccharum. Sugar cane, 1068
Secale. Rye, 2141, 5989
Sesamum. Sesame, 2925
Solanum. Potato, 901, 918, 931, 2679, 2708, 2724, 4580–1
Sorghum, 675, 688, 2462, 2471, 4268
Stone fruits, 3014
Theobroma. Cacao, 2019, 2021
Trifolium. Minor species, 1983
Trifolium. White clover, 6452
Triticum. Wheat, 395, 400, 414, 421–2, 2140–1, 2175, 2243, 3662, 3948, 3997–8, 4010, 4039, 5459, 5975, 5989, 6032, 6042
Vitis, 1382, 1388
Zea. Maize, 568, 1981, 2007, 2328, 2332, 2341, 2384, 3520, 4172, 4182, 6162, 6182, 6195, 6207

ZAMIA

- γ rays, 6985

Zea. Maize

- Acclimatization, 6164
ADP-glucose-starch glycosyl transferases, 11

Zea. Maize—continued

- Aging, 2372
Alcohol dehydrogenase, 4103
Aminoacids, 3823, 6125, 6193
Amylose, 499, 571
Anatomy, 4137
Androgenesis, 5431
Aneuploidy, 548, 2367, 6176
Apomixis, 5430
Back crossing, 571
Biochemistry, 527, 565, 3628, 4137, 4178, 5479
Breeding, 223, 489–90, 553, 1833, 2119, 2122, 2134, 2301, 2303, 2306–7, 2309–11, 2361, 2368, 3777, 4097–9, 4169, 6006–7, 6122, 6202, 6204, 6216
Carbohydrates, 3627, 4100, 5479
Carotenoids, 2381
Caryopsis, 530, 577, 2371, 2380–1, 6195
Catechol oxidase, 3733
Cell division, 3679
Cellulose, 6180
Centres of origin, 6171
Cephalosporium, 592–3
Chemicals, effect of, 2053, 4157, 6161
Chlorophyll, 563, 4108, 4124, 5564, 6179, 6194
Chromosome aberrations, 17, 545–7, 2001, 6172–4
Chromosome morphology, 544–5, 2366, 4164, 6170–1
Climate, 5515
Cochliobolus, 584–5, 5527
Colchicine, 6177
Cold, effect of, 519, 2371, 2373, 5488–9
Cold resistance, 523, 581–2, 2371, 4127, 4185–8
Colour, 28, 2312–3, 2315–6, 2351–2, 2380–1, 2395, 3471, 3498, 4106, 6130
Combining ability, 531, 2334–7, 2364, 4170, 6170, 6185
Competition, 6208
Complex loci, 3675
Crossing over, 547
Cytoplasmic inheritance, 536, 585, 1834, 2343–4, 2377, 2380, 4149, 6123, 6192
Density of stand, 521, 1981, 2384–5, 4126, 4182, 6182, 6206–7
Development, 272, 526, 550, 4137, 4168, 5955, 6153, 6180
Development, abnormal, 498, 3495, 6183
2,4-Dichlorophenoxyacetic acid, 597
Diethyl sulphate, 3496
Diplodia, 590–1, 2386, 3749, 4192, 5676
Dithione, 4191
Dominance, 2347
Ecotypes, 2363
Embryo, 6178
Endosperm, 6160
Ensilage, 515, 3766, 6197
Enzymes, 558, 2314, 3507, 5673, 5684, 5860
Epistasis, 4151
Erwinia, 1976, 5679
Esterase, 2370
Ethyl methanesulphonate, 539, 3640, 3675, 6159
Fatty oil, 520, 577–8, 2003, 4181, 6199, 6201–2
Fertilization, sexual, 397, 558, 2375
Fungi, 534, 1955, 5655, 5666
 γ rays, 3498, 3738, 4155–6, 6156–9, 6173
Genetics, 11, 28, 494–6, 498–9, 562, 567, 570, 572–3, 580, 590–1, 1964, 2001, 2106, 2312–5, 2348–9, 2353, 2370, 2375–6, 2386, 2393, 3471, 3486, 3495, 3627–8, 4100–6, 4108, 4181, 4192, 5430, 5533, 6124–6, 6128, 6198, 6211, 6217
Genome analysis, 533
Geographical races, 6167
Geography, 2941
Germination, 2371, 2373, 4162, 4187–8
Gibberella, 506, 2387, 3673, 5477
Gibberellins, 586, 3637, 5477, 5955
Glutathione, 528
Grain shrivelling, 6210
Grain splitting, 5886

Zea. Maize—continued

- Growth period, 492, 552-3, 2326, 2372, 4136, 4169-72, 5515, 5885, 6007, 6181-2
Haploidy, 549, 2369, 6178
Heat, drought resistance, 221, 4134
Height, 524, 538, 2331, 4172, 6128, 6155
Heliothis, 595, 4184, 4194, 6215-7
Heterochromatin, 545
Heterosis, 525-30, 1833-4, 2007, 2332-3, 2343, 2378, 3811, 4131-40, 4145, 5548, 6127, 6148-51
History and evolution, 543, 1833, 4163, 5600, 6165-8, 6183
Hormones, 4135
Hybrid varieties, 201, 212, 226, 497, 502-24, 568, 631, 647, 1187-8, 1893, 1959, 1965, 2003, 2011, 2104, 2317-20, 2322-31, 2368, 3515, 3751, 4110-27, 4143-4, 4187-8, 5504, 5524-5, 5675-7, 5683, 5942, 6118-21, 6131-40, 6147, 6209
Hybridization, 500-1, 2004, 2348, 3748, 3751, 4177, 6143, 6146, 6109
Hybridization, intergeneric, 532-3, 1056, 1937, 2321, 2338, 4141
Inbreeding, 535, 566, 1907, 2339-41, 2357, 4142-8, 6152, 6191
Indole-3-acetic acid, 2378, 4139
Inflorescence, 2353, 4157, 4166
Inhibitors, 2313
Insects, 3779, 5681, 6214
Iron, 6211
Irrigation, 5677
Khushia, 534
Land races, 2364-5
Leaf, 567-8, 6143
Light, effect of, 3737
Linkage, 544, 559, 2389, 3509, 4109
Lodging, 583, 4189
Lysine, 572, 6125
Matrocliny, 1896, 2343, 2347, 4150
Meiosis, 2321, 2350, 3645, 4164-5, 5423, 6174
Mičurinism, 581, 2339, 4146-7, 4174, 5713, 6187-8
Mitochondria, 525, 6124, 6169
Mixtures of crops or genotypes, 522, 1662, 4145, 5294
Modifiers, 28, 2312-13, 2316, 2349, 2351-2, 3496, 4107, 6129-30
Molecular genetics, 6153
Morphology, 4138
Mutation, 98, 537-8, 2349-50, 2394, 3486, 3495, 4153, 5564, 6154
Mutation, back, 540
Mutation, induced, 15, 31, 539, 1976, 2053-4, 3470, 3496, 3498, 3675, 3737-8, 4154-7, 5674, 6156-61, 6173, 6179
Mutation, spontaneous, 2351-3, 3505, 6155, 6194
Neutrons, 2356, 4155-6, 6173
Nitrate reductase, 500
Nitrogen, 4177
Nondisjunction, 2367
Nutrients, 579-80, 4105, 4125, 4140
Nucleic acids, 548, 2342, 3679, 5516
Oscinella, 5684, 6218
Ostrinia, 494, 2388-9, 5538, 5682-3, 5687, 6219
Pathology, 6122
Phenols, 532
Phosphatase, 4119
Phosphorus, 6126
Photoperiodism, 4171
Photosynthesis, 4120, 4153, 4167
Physiology, 530
Plant collections, 4180, 6204
Plastids, 3505
Pollen, 564-5, 2379, 5516, 6168
Pollination, 517, 554-7, 2004, 2340, 2374, 2379, 4121-2, 4134, 4173-4, 6173, 6184-9
Polyploidy, 2350, 2368, 3645, 3823, 6152, 6177
Population genetics, 31
Protein, 519, 564, 570, 575-6, 2328, 4104, 6125, 6142, 6154, 6199-20

Zea. Maize—continued

- Puccinia*, 212, 588-9, 3748, 4191, 5527, 5533, 5860, 5885, 6213
Pythium, 2371, 2373
Quality, for storage, 4195
Quality, nutritive value, 213, 569, 2365, 2382, 4180, 6150, 6180, 6197
Quality, of edible product, 4127, 6196, 6210
Quantitative characters, 2347, 2366, 4136, 4152, 6150
Radiation, 90, 539, 2053-4, 3471
Respiration, 631
Rhizoctonia, 3749
Rhopalosiphum, 6116
Ribonuclease, 6160
Root, 529, 566
Seed production, 2329-30, 4144-5, 6145-7, 6151
Seed storage, 2383
Seedlings, 4188
Segregation, 4159, 4196, 6175
Selection, artificial, 516, 541, 1973, 2354-7, 4158-60, 6162, 6200
Sex, 4138, 4179
Sitophilus, 2390, 4195
Sitotroga, 5713
Soil PH, 6203
Sporosporium, 5500
Sowing, 582
Sphacelotheca, 6212
Starch, 574
Statistics, biometry, 491
Statistics, experimental designs, 2346
Statistics, genetics, 4165, 6149
Stem, 4179
Sterility, fertility, 518, 559, 564, 1937, 4166
Sterility, male, 501, 560-2, 1749, 1888, 2327, 2344, 2376-7, 3520, 3779, 4123, 4148, 4175-7, 5516, 6151, 6190-2
Successional crops, 4183, 6182
Sugar, 573, 6150, 6198
Synthetics, 2332, 4128-30
Taxonomy, 2363
Temperature, effect of, 589, 5548, 5564, 6203
Toxic soils, 285
Transformation, 2342
Translocation, 2367, 3509, 4166, 6175
Trichometasphaeria, 2004, 2106, 3628, 3848, 4190
Tryptophane, 6142
Ultraviolet rays, 3470, 3737
Urocystis, 5884
Ustilago, 534-5, 587, 5666-75, 5677-8, 5884
Variation, 272, 495, 2345-8, 4102, 4151-2
Varieties, 206, 542, 581, 1956, 2121, 2133, 2310, 2358-60, 2362, 3748, 3752, 4118, 4162, 5514, 5543, 6163-4
Variety trials, 203, 492, 511-5, 1957, 1959, 2119, 2302, 2304, 2308, 2320, 2322-5, 2336, 2362, 3766, 4094-6, 4117, 4143, 5504, 5942, 6115, 6117-21, 6137-9
Viruses, 596, 1897, 2391-4, 3661, 3779, 4196, 6220
Water, effect of, 4177
X rays, 17, 1976, 2001, 3470, 6176
Xenia, 6186
Yield, 568, 1981, 2007, 2328, 2332, 2341, 2384, 3520, 4172, 4182, 6162, 6182, 6195, 6207
Zygina, 5681
Zea. Popcorn
Fertilization, sexual, 603
Genetics, 493
Multiple genes, 604
Quality, of edible product, 493
Sterility, male, 604
Varieties, 4161
Variety trials, 6222
Zea. Sweet corn, 6116
Carbohydrates, 3627
Carpophilus, 602
Colour, 599
Conotelus, 602

Zea. Sweet corn—*continued*

Genetics, 598, 3627, 6221
Glumes, 6221
Growth period, 4199
Hybrid varieties, 600-1, 2396-7, 4198-9, 7016
Hybridization, 599
Inbreeding, 2398
Insects, 224
Mutation, induced, 95
Quality, for canning, 601
Sugar, 598, 4199
Taxonomy, 2398
Varieties, 4161, 6221
Variety trials, 600, 4197

Zinc

Lycopersicon. Tomato, 1596

Malus. Apple, 5768

Phaseolus, 1626

Zineb

Cicer. Chickpea, 5318

Zingiber. Ginger

Bacteria, 4866

Meiosis, 162

Zizyphus. Jujube

Breeding, 3099

Zygina

Zea. Maize, 5681

ERRATA TO "PLANT BREEDING ABSTRACTS"

Vol. XXXVII, Abst. 284, for Dorofeev, V. T. read Dorofeev, V. F.

Abst. 952, line 2, for *Rotylenchulus* read *Rotylenchulus*.

Abst. 1342-3, in journal reference, for Exp. Agric. read Exp. Hort.

Abst. 2020, for Williams, R. J. read Williams, J. R.

Abst. 2138, for Sičkar, M. M. read Sičkar, N. M.

Abst. 2900, in para. 2, delete first and last sentence, and delete *and tetraploid* from line 5; in para. line 2, for *no* read *a*, and line 9, for *sex-linked* read *sex-limited*.

Abst. 3121, in journal reference, add Hors. Sér.

Abst. 5121, line 3, for Armenian read American.

Abst. 5326, for Ražinskajte D. K. Ražinkaitė, D.] read Ražinskajte, D. K. [Ražinskaitė, D.]

Abst. 5985, line 3, for 14 read 12; line 4, for 12 read 14.

Abst. 6560, line 1, for α read γ .

Abst. 7005, line 1, for *Pinus* read *Picea*.

Author index to No. 3, Moretteni, A., for 4978 read 4928.

Author index to No. 4, Gerlach, W., for 6671 read 6691.

Department of Agricultural Science and Applied Biology,
Cambridge, CB2 3DX, England

Consultant Director:

PROF. J. W. L. BEAMENT, Sc.D., F.R.S., Drapers' Professor of Agriculture.

Director: R. H. RICHENS, M.A., Ph.D.

Assistant Director: Miss O. HOLBEK, B.Sc.

Scientific Information Officers: Miss I. M. BROWN, B.Sc.

MRS. J. CHENEY, B.Sc.

B. E. HEISELER

J. E. LODER, M.Sc.

Miss J. McLELLAN, B.Sc.

F. E. MORGAN, B.A.

Miss C. YOUNG, B.Sc.

Publications:

PLANT BREEDING ABSTRACTS

Issued quarterly. One volume (4 numbers and annual indexes) per calendar year.

Annual Subscription:

Rate to subscribers in Non-Contributing Countries £15 15s. (\$41.00),

Rate to subscribers in Contributing Countries £8 per volume (including indexes).

One-Sided Copies.—Copies of *Plant Breeding Abstracts* printed one side only are available at an additional cost of £1 10s.

Back Numbers.—Volume 1-36 of *Plant Breeding Abstracts* are now available at the price of £7 per volume and 37 & 39 at the price of £10 10s. per volume including index.

Important Note.—Every effort is made to make *Plant Breeding Abstracts* as complete as possible and its notices of papers referring to plant breeding or the genetics of crop plants as prompt as possible. To aid in this, authors are invited to send to the Director copies of their papers immediately on publication.

OTHER PUBLICATIONS OF THE COMMONWEALTH BUREAU OF PLANT BREEDING AND GENETICS

TECHNICAL COMMUNICATIONS

s. d.

Joint Publication No. 5. The Production of Seed of Root Crops and Vegetables ..	5	0
Joint Publication No. 8. Forest Tree Breeding and Genetics, by R. H. Richens ..	5	0
6. The Action and Use of Colchicine in the Production of Polyploid Plants, by J. L. Fyfe ..	3	0
12. The New Genetics in the Soviet Union, by P. S. Hudson and R. H. Richens ..	6	0
13. The Use of Heterosis in the Production of Agricultural and Horticultural Crops, by Miss T. Ashton ..	3	0
14. Technique of Breeding for Drought Resistance in Crops, by Miss T. Ashton ..	2	6
15. Field Trials II: The Analysis of Covariance, by J. Wishart ..	5	0
16. The Theory and Practice of the Backcross Method in Breeding of Non-Cereal Crops, by Mrs. M. Thomas ..	15	0
17. Abstract Bibliography of Cotton Breeding and Genetics, 1900-1950, by R. L. Knight ..	21	0
18. Principles and Practice of Field Experimentation, by J. Wishart and H. G. Sanders. 2nd Edition ..	21	0

ABRIDGED TRANSLATION

Cultivated Plants and their Wild Relatives, by P. M. Žukovskij ..	10	0
---	----	---

ANNOTATED BIBLIOGRAPHIES

1. Breeding Barley for Resistance to Scald ..	6	0
---	---	---

Orders should be addressed to:—

COMMONWEALTH AGRICULTURAL BUREAUX, Central Sales, Farnham Royal, Bucks., England.

Loss in Transit.—Claims for numbers of *Plant Breeding Abstracts* lost in transit will only be considered if notice of such loss is received within three months of the date of posting.

CAB JOURNALS

ANNUAL SUBSCRIPTION RATES, 1970

The Executive Council of the COMMONWEALTH AGRICULTURAL BUREAUX regret that it has been necessary to increase subscriptions as from 1 January, 1970, to help to offset increased costs. The new prices are set out below.

Despite the increases, subscribers are still able to obtain the journals (except *Food Science and Technology Abstracts*) at prices well below cost because CAB is heavily subsidized.*

The journals provide a total of well over 100,000 abstracts and citations by title each year, and constitute the only comprehensive coverage in English of the world literature of agriculture and related sciences.

Title	Annual Subscription				Published
	Rate to subscribers in non-contributing countries		Rate to subscribers in contributing countries		
	£	s.	£	s.	
Review of Applied Entomology					
Series A—Agricultural.	13	10	\$35.50	6 15	M
Series B—Medical and Veterinary ..	6	0	\$16.00	3 0	M
Bulletin of Entomological Research ..	7	10	\$19.50	5 0	Q
Review of Plant Pathology (formerly					
Review of Applied Mycology) ..	15	15	\$41.00	8 0	M
Review of Medical and Veterinary					
Mycology	6	0	\$16.00	3 0	Q
Nutrition Abstracts and Reviews ..	25	0	\$65.00	12 10	Q
World Agricultural Economics and					
Rural Sociology Abstracts	11	5	\$29.50	5 15	Q
Animal Breeding Abstracts	15	15	\$41.00	8 0	Q
Veterinary Bulletin	18	15	\$49.00	9 10	M
Index Veterinarius	22	10	\$58.50	11 5	Q
Dairy Science Abstracts	15	15	\$41.00	8 0	M
Forestry Abstracts	15	15	\$41.00	8 0	Q
Helminthological Abstracts					
Series A—Animal Helminthology ..	10	0	\$26.00	5 0	Q
Series B—Plant Nematology	5	0	\$13.00	2 10	Q
Horticultural Abstracts	18	0	\$47.00	9 0	Q
Herbage Abstracts	11	5	\$29.50	5 15	Q
Field Crop Abstracts	11	5	\$29.50	5 15	Q
Plant Breeding Abstracts	15	15	\$41.00	8 0	Q
Soils and Fertilizers	17	5	\$45.00	8 15	A
Weed Abstracts	10	0	\$26.00	5 0	A
Food Science and Technology Abstracts	75	0	\$195.00	75 0	M
(produced in collaboration with Institut für Dokumentationswesen and Institute of Food Technologists)					

M = Monthly

Q = Quarterly

A = Alternate months

All the above journals are obtainable (post free) from:

CENTRAL SALES BRANCH
COMMONWEALTH AGRICULTURAL BUREAUX
FARNHAM ROYAL, BUCKS, ENGLAND

* The following Governments contribute to the Commonwealth Agricultural Bureaux: The United Kingdom of Great Britain and Northern Ireland, Canada, Australia, New Zealand, India, Pakistan, Ceylon, Ghana, Malaysia, Nigeria, Cyprus, Sierra Leone, Tanzania, Jamaica, Trinidad and Tobago, Uganda, Kenya, Malawi, Zambia, The Gambia, Guyana, Botswana, Barbados, Dependent Territories and the Republic of Ireland (Associate Government). Mauritius, Swaziland and the Associated States of the Eastern Caribbean have been invited to become members.

